

N-cadherin Monoclonal Antibody (3B9)

Catalog Number33-3900

Product data sheet

Details		Species Reactivity	
Size	100 µg	Species reactivity	Chicken, Human, Mouse, Pig, Rat
Host/Isotope	Mouse / IgG1, kappa	Published species	Tag, Avian, Pig, Rat, Non-human primate, Hamster, Zebrafish, Human, Mouse, Rhesus monkey, Not Applicable, Horse, Dog, Rabbit
Class	Monoclonal		
Type	Antibody		
Clone	3B9		
Immunogen	Recombinant domain corresponding to the intracellular domain of chicken N-Cadherin	Tested Applications	Dilution *
Conjugate	Unconjugated	Immunohistochemistry (Paraffin) (IHC (P))	1-5 µg/mL
Form	Liquid	Immunoprecipitation (IP)	3-5 µg
Concentration	0.5 mg/mL	Western Blot (WB)	1:500-1:1,000
Purification	Protein A	Immunocytochemistry (ICC/IF)	1-3 µg/mL
Storage buffer	PBS, pH 7.4	Published Applications	
Contains	0.1% sodium azide	Western Blot (WB)	See 60 publications below
Storage Conditions	-20°C	Immunohistochemistry (IHC)	See 43 publications below
		Immunocytochemistry (ICC/IF)	See 24 publications below
		Immunohistochemistry (Paraffin) (IHC (P))	See 26 publications below
		Immunohistochemistry (Frozen) (IHC (F))	See 8 publications below
		Flow Cytometry (Flow)	See 2 publications below
		Miscellaneous PubMed (Misc)	See 18 publications below
		Immunoprecipitation (IP)	See 1 publications below

\* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

Product specific information

This antibody is specific for N-cadherin and does not cross-react with other cadherin family members including P- and E-cadherins. For IHC with this antibody use formalin-fixed, paraffin-embedded tissue and heat-induced epitope retrieval.

Background/Target Information

N-cadherin is a 140 kDa protein belonging to a family of transmembrane molecules that mediate calcium-dependent intercellular adhesion. Cadherins are involved in controlling morphogenetic movements during development and regulate cell surface adhesion through homotypic adhesion with the same cadherin species. N-cadherin's function is dependent on its association with the actin-cytoskeleton and is mediated through interactions between the C-terminal region of N-cadherin and the cytoplasmic catenin proteins. The stability of this association is regulated by phosphorylation and dephosphorylation of beta-catenin. Further, N-cadherin is a calcium dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. The protein functions during gastrulation and is required for establishment of left-right asymmetry.

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

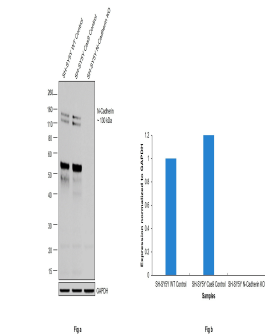
Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

Product Images For N-cadherin Monoclonal Antibody (3B9)

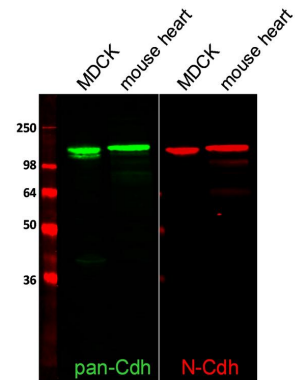
N-cadherin Antibody (33-3900)

Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A loss of signal was observed for target protein in N-Cadherin KO cell line compared to control cell line using N-cadherin Monoclonal Antibody (3B9) (Product # 33-3900). {KO}



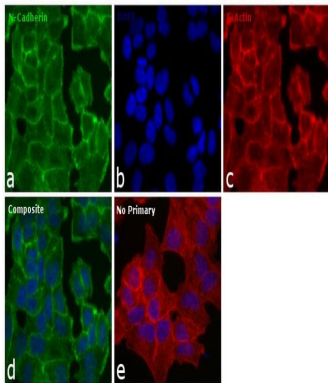
N-cadherin Antibody (33-3900)

Antibody specificity was demonstrated using two independent antibodies against the target protein. Western blot of N-Cadherin using N-cadherin Monoclonal Antibody (Product # 33-3900), tested in parallel with Pan-cadherin Polyclonal Antibody (Product # 71-7100), showing a similar expression pattern for N-cadherin across different test samples. {IAV}



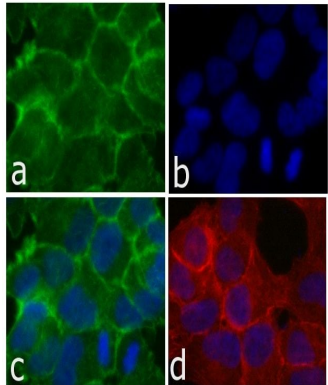
N-cadherin Antibody (33-3900) in ICC/IF

Immunofluorescent analysis of N-Cadherin was done on 70% confluent log phase Caco-2 cells. The cells were fixed with 4% paraformaldehyde for 15 minutes; permeabilized with 0.25% Triton™ X-100 for 10 minutes followed by blocking with 5% BSA for 1 hour at room temperature. The cells were incubated with N-Cadherin Mouse Monoclonal Antibody (Product # 33-3900) at 1 µg - 2 µg in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor® 488 Rabbit Anti-Mouse IgG Secondary Antibody (Product # A-11059) at a dilution of 1:400 for 30 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938) and cytoskeletal F-actin (red) staining using Rhodamine Phalloidin (Product # R415, 1:300) panel c. Panel d is a merged image showing cell junctional localization of N-Cadherin. Panel e shows no primary antibody. The images were captured at 20X magnification.



N-cadherin Antibody (33-3900) in ICC/IF

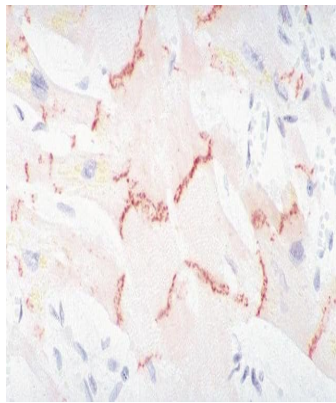
Immunofluorescent analysis of N-Cadherin was done on 70% confluent log phase Caco-2 cells. The cells were fixed with 4% paraformaldehyde for 15 minutes; permeabilized with 0.25% Triton™ X-100 for 10 minutes followed by blocking with 5% BSA for 1 hour at room temperature. The cells were incubated with N-Cadherin Mouse Monoclonal Antibody (Product # 33-3900) at 1 µg - 2 µg in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor® 488 Rabbit Anti-Mouse IgG Secondary Antibody (Product # A-11059) at a dilution of 1:400 for 30 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). Panel c is a merged image showing cell junctional localization of N-Cadherin. Panel d shows no primary antibody. The images were captured at 20X magnification.



For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

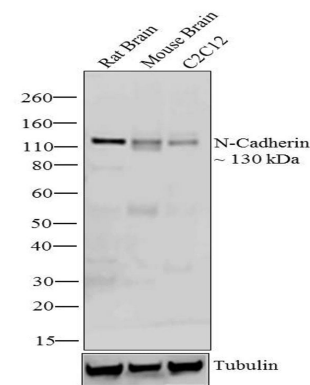
Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.



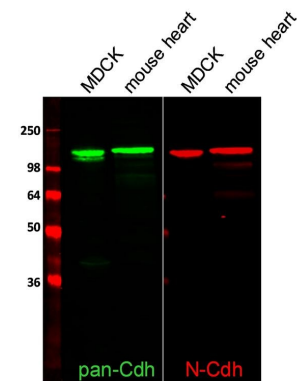
### N-cadherin Antibody (33-3900) in IHC

Immunohistochemistry analysis of N-Cadherin was done on human heart tissue section. The tissue was probed with N-cadherin Mouse Monoclonal Antibody (Product # 33-3900).



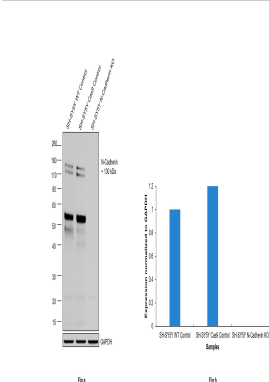
### N-cadherin Antibody (33-3900) in WB

Western blot analysis of N-Cadherin was performed by loading 20 µg of Rat Brain (lane1), Mouse Brain (lane2) and C2C12 (lane3) lysates using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX), XCell SureLock™ Electrophoresis System (Product # EI0002), Novex® Sharp Pre-Stained Protein Standard (LC5800). Proteins were transferred to a PVDF membrane and blocked with 5 % skim milk for 1 hour at room temperature. N-Cadherin was detected at ~130 kDa using N-Cadherin Mouse Monoclonal Antibody (Product # 33-3900) at 1 µg - 3 µg/mL in 2.5 % skim milk at 4°C overnight on a rocking platform. Goat Anti-Mouse IgG - HRP Secondary Antibody (Product # 62-6520) at 1:4000 dilution was used and chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



### N-cadherin Antibody (33-3900) in WB

Western blot analysis of total Cadherin and N-Cadherin was performed by loading 2 µL SeeBlue® Plus2 Prestained Protein Ladder (Product # LC5925), 50 µg of MDCK cell lysates and 10 µg mouse heart lysate per well onto a 4-20% Tris-HCl polyacrylamide gel. Proteins were transferred to a nitrocellulose membrane and blocked with 1% BSA/TBST for at least 1 hour at room temperature. Total cadherin was detected using a rabbit antibody (Product # 71-7100) and N-Cadherin was detected using a mouse antibody (Product # 33-3900), both at a concentration of 1 µg/mL in blocking buffer overnight at 4°C on a rocking platform. The blot was then incubated with goat anti-rabbit IgG-Alexa Fluor 790 secondary antibody (Product # A11369) and goat anti-mouse IgG-Alexa Fluor 680 secondary antibody (Product # A-21058) at a dilution of 1:10,000 for at least 1 hour. Fluorescent detection was performed using the Odyssey® CLx imaging system (Li-cor Biosciences). Image is generated by Joell Solan in Paul Lampe Lab at Fred Hutchinson Cancer Research Center.



### N-cadherin Antibody (33-3900) in WB

Knockout of N-Cadherin was achieved by CRISPR-Cas9 genome editing using LentiArray™ Lentiviral sgRNA (Product # A32042, Assay ID CRISPR914282\_LV) and LentiArray Cas9 Lentivirus (Product # A32064). Western blot analysis of N-Cadherin was performed by loading 30 µg of SH-SY5Y wild type (Lane 1), SH-SY5Y Cas9 (Lane 2) and SH-SY5Y N-cadherin KO (Lane 3) membrane enriched extracts. The samples were electrophoresed using NuPAGE™ Novex™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with N-cadherin Monoclonal Antibody (3B9) (Product # 33-3900, 1:500 dilution) and detected by Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:10,000 dilution) using the iBright™ FL1500 (Product # A44115). Chemiluminescent detection was performed using SuperSignal™ West Atto Ultimate Sensitivity Substrate (Product # A38556). Loss of signal upon CRISPR mediated knockout (KO) using the LentiArray™ CRISPR product line confirms that antibody is specific to N-Cadherin. Uncharacterized bands was observed in lane 1 and lane 2 around ~45 kDa-55 kDa.

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

PubMed References For N-cadherin Monoclonal Antibody (3B9)

60 Western Blot References

Species / Dilution	Summary
Rat / 1:200	33-3900 was used in Western Blotting to study how PFOS-induced BTB disruption is mediated by down-regulating phosphorylated FAK-Tyr(407) and connexin-43.
	Endocrinology (Jan 2014; 155: 249) <b>"Perfluorooctanesulfonate (PFOS) perturbs male rat Sertoli cell blood-testis barrier function by affecting F-actin organization via p-FAK-Tyr(407): an in vitro study."</b> Author(s):Wan HT,Mruk DD,Wong CK,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1210/en.2013-1657">http://dx.doi.org/10.1210/en.2013-1657</a>
Not Applicable / Not Cited	33-3900 was used in western blot to measure expression of E-cadherin and related proteins in breast cancer cell lines
	Journal of cellular physiology (Mar 2010; 222: 596) <b>"Expression analysis of epithelial cadherin and related proteins in IBH-6 and IBH-4 human breast cancer cell lines."</b> Author(s):Lapyckyj L,Castillo LF,Matos ML,Gabrielli NM,Lüthy IA,Vazquez-Levin MH PubMed Article URL: <a href="http://dx.doi.org/10.1002/jcp.21974">http://dx.doi.org/10.1002/jcp.21974</a>
Dog / 1:1000	33-3900 was used in Western Blotting to study the effect of hypothermia on gap junction coupling and Na <sup>+</sup> channel function in acute cardiac ischemia.
	American journal of physiology. Heart and circulatory physiology (May 2017; 312: H886) <b>"Mild hypothermia preserves myocardial conduction during ischemia by maintaining gap junction intracellular communication and Na<sup>+</sup> channel function."</b> Author(s):Nassal MMJ,Wan X,Dale Z,Deschênes I,Wilson LD,Piktel JS PubMed Article URL: <a href="http://dx.doi.org/10.1152/ajpheart.00298.2016">http://dx.doi.org/10.1152/ajpheart.00298.2016</a>
Mouse / 1:2000	33-3900 was used in Western Blotting to reveal that metavinculin bears higher molecular forces but is less frequently engaged as compared to vinculin, leading to altered force propagation in cell adhesions.
	Nature communications (Dec 2020; 11: ) <b>"Metavinculin modulates force transduction in cell adhesion sites."</b> Author(s):Kanoldt V,Kluger C,Barz C,Schweizer AL,Ramanujam D,Windgasse L,Engelhardt S,Chrostek-Grashoff A,Grashoff C PubMed Article URL: <a href="http://dx.doi.org/10.1038/s41467-020-20125-z">http://dx.doi.org/10.1038/s41467-020-20125-z</a>
Human / Not Cited	The Journal of biological chemistry (Apr 2002; 277: 12906) <b>"The Erbin PDZ domain binds with high affinity and specificity to the carboxyl termini of delta-catenin and ARVCF."</b> Author(s):Laura RP,Witt AS,Held HA,Gerstner R,Deshayes K,Koehler MF,Kosik KS,Sidhu SS,Lasky LA PubMed Article URL: <a href="http://dx.doi.org/10.1074/jbc.M200818200">http://dx.doi.org/10.1074/jbc.M200818200</a>
	33-3900 was used in Western Blotting to indicate that HTSF-derived exosomes may play a role in the epidermal pathological development of hypertrophic scar.
Human / 1:1,000	International journal of molecular sciences (Mar 2023; 24: ) <b>"Effect of Hypertrophic Scar Fibroblast-Derived Exosomes on Keratinocytes of Normal Human Skin."</b> Author(s):Cui HS,Joo SY,Lee SY,Cho YS,Kim DH,Seo CH PubMed Article URL: <a href="http://dx.doi.org/10.3390/ijms24076132">http://dx.doi.org/10.3390/ijms24076132</a>
	33-3900 was used in Western Blotting to suggest that Rab4A participates in adherens junction dynamics in the testis.
Rat / Not Cited	Journal of andrology (Dec 2007; 28: 742) <b>"Rab4A GTPase catenin interactions are involved in cell junction dynamics in the testis."</b> Author(s):Mruk DD,Lau AS,Sarkar O,Xia W PubMed Article URL: <a href="http://dx.doi.org/10.2164/jandrol.106.002204">http://dx.doi.org/10.2164/jandrol.106.002204</a>
	33-3900 was used in western blot to elucidate a deletion of AMP-activated protein kinase in mouse Sertoli cells that modify germ cell quality
Not Applicable / 1:100	Molecular and cellular endocrinology (Mar 2016; 423: 96) <b>"Specific deletion of AMP-activated protein kinase (1AMPK) in mouse Sertoli cells modifies germ cell quality."</b> Author(s):Bertoldo MJ,Guibert E,Faure M,Guillou F,Ramé C,Nadal-Desbarats L,Foretz M,Viollet B,Dupont J,Froment P PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.mce.2016.01.001">http://dx.doi.org/10.1016/j.mce.2016.01.001</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.



	33-3900 was used in Western Blotting to describe a method for establishing a robust renal proximal tubular epithelial cell model suitable for further experimentation.
Human / 1:500	<p>PloS one (Jan 2014; 8: )</p> <p><b>"Isolation and characterization of a primary proximal tubular epithelial cell model from human kidney by CD10/CD13 double labeling."</b></p> <p>Author(s):Van der Hauwaert C,Savary G,Gnemmi V,Glowacki F,Pottier N,Bouillez A,Maboudou P,Zini L,Leroy X,Cauffiez C,Perrais M,Aubert S</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1371/journal.pone.0066750">http://dx.doi.org/10.1371/journal.pone.0066750</a></p>
	33-3900 was used in Western Blotting to show that secreted protein acidic and rich in cysteine (SPARC) is highly expressed in PCa tissues with a higher Gleason score.
Human / 1:1000	<p>Asian journal of andrology (Aug 2020; 21: 557)</p> <p><b>"Secreted protein acidic and rich in cysteine (SPARC) induces epithelial-mesenchymal transition, enhancing migration and invasion, and is associated with high Gleason score in prostate cancer."</b></p> <p>Author(s):López-Moncada F,Torres MJ,Castellón EA,Contreras HR</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.4103/aja.aja_23_19">http://dx.doi.org/10.4103/aja.aja_23_19</a></p>
	33-3900 was used in western blot to determine the localization and function of N-cadherin in human spermatozoa and oocytes
Not Applicable / Not Cited	<p>International journal of andrology (Feb 2010; 33: e228)</p> <p><b>"Neural cadherin is expressed in human gametes and participates in sperm-oocyte interaction events."</b></p> <p>Author(s):Marín-Briggiler CI,Lapyckyj L,González Echeverría MF,Rawe VY,Alvarez Sedó C,Vazquez-Levin MH</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1111/j.1365-2605.2009.00999.x">http://dx.doi.org/10.1111/j.1365-2605.2009.00999.x</a></p>
	33-3900 was used in western blot to examine the effects of mammary gland-specific deletion of Bin1 on initiation and progression of breast cancer in mice
Not Applicable / 1:1000	<p>Cancer research (Jan 2007; 67: 100)</p> <p><b>"Bin1 ablation in mammary gland delays tissue remodeling and drives cancer progression."</b></p> <p>Author(s):Chang MY,Boulden J,Sutanto-Ward E,Duhadaway JB,Soler AP,Muller AJ,Prendergast GC</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1158/0008-5472.CAN-06-2742">http://dx.doi.org/10.1158/0008-5472.CAN-06-2742</a></p>
	33-3900 was used in Western Blotting to show that endothelial-mesenchymal transitions emerged in endothelial cells of cerebral arteriovenous malformation and caused disruption of the lumen.
Human / Not Cited	
Mouse / Not Cited	<p>The Journal of clinical investigation (Jun 2019; 129: 3121)</p> <p><b>"Elevated endothelial Sox2 causes lumen disruption and cerebral arteriovenous malformations."</b></p> <p>Author(s):Yao J,Wu X,Zhang D,Wang L,Zhang L,Reynolds EX,Hernandez C,Boström KI,Yao Y</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1172/JCI125965">http://dx.doi.org/10.1172/JCI125965</a></p>
	Oncogene (Oct 2005; 24: 6902)
Human / Not Cited	<p><b>"Gene expression in thyroid autonomous adenomas provides insight into their physiopathology."</b></p> <p>Author(s):Wattel S,Mircescu H,Venet D,Burniat A,Franc B,Frank S,Andry G,Van Sande J,Rocmans P,Dumont JE,Detours V,Maenhaut C</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1038/sj.onc.1208849">http://dx.doi.org/10.1038/sj.onc.1208849</a></p>
	Human pathology (Dec 1995; 26: 1363)
Human / Not Cited	<p><b>"The differential expression of N-cadherin and E-cadherin distinguishes pleural mesotheliomas from lung adenocarcinomas."</b></p> <p>Author(s):Peralta Soler A,Knudsen KA,Jaurand MC,Johnson KR,Wheelock MJ,Klein-Szanto AJ,Salazar H</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1016/0046-8177(95)90302-x">http://dx.doi.org/10.1016/0046-8177(95)90302-x</a></p>
	33-3900 was used in Western Blotting to demonstrate the role of N-cadherin in maintaining the progenitor status of primary human limbal epithelial cells in vitro.
Mouse / Not Cited	<p>Investigative ophthalmology &amp; visual science (Oct 2009; 50: 4640)</p> <p><b>"N-cadherin in the maintenance of human corneal limbal epithelial progenitor cells in vitro."</b></p> <p>Author(s):Higa K,Shimmura S,Miyashita H,Kato N,Ogawa Y,Kawakita T,Shimazaki J,Tsubota K</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1167/iov.09-3503">http://dx.doi.org/10.1167/iov.09-3503</a></p>
	33-3900 was used in immunocytochemistry and western blot to identify and characterize a novel classical cadherin adhesion system
Not Applicable / Not Cited	<p>Journal of cell science (Sep 2005; 118: 3883)</p> <p><b>"Modulating the strength of cadherin adhesion: evidence for a novel adhesion complex."</b></p> <p>Author(s):Kim YJ,Sauer C,Testa K,Wahl JK,Svoboda RA,Johnson KR,Wheelock MJ,Knudsen KA</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1242/jcs.02508">http://dx.doi.org/10.1242/jcs.02508</a></p>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	33-3900 was used in Western Blotting to study connexin-43 in cardiomyocyte remodeling in a mouse model of Duchenne muscular dystrophy.
Mouse / 1:2000	<p>The Journal of clinical investigation (Apr 2020; 130: 1713)</p> <p><b>"Prevention of connexin-43 remodeling protects against Duchenne muscular dystrophy cardiomyopathy."</b></p> <p>Author(s):Himelman E,Lillo MA,Nouet J,Gonzalez JP,Zhao Q,Xie LH,Li H,Liu T,Wehrens XH,Lampe PD,Fishman GI,Shirokova N,Contreras JE,Fraidenraich D</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1172/JCI128190">http://dx.doi.org/10.1172/JCI128190</a></p>
	33-3900 was used in Western Blotting to investigate the clinical role and biological function of Disabled homolog-2 (DAB2) in human urothelial carcinoma of the bladder (UCB).
Human / 1:500	<p>Diagnostics (Basel, Switzerland) (Jan 2020; 10: )</p> <p><b>"Disabled Homolog 2 (DAB2) Protein in Tumor Microenvironment Correlates with Aggressive Phenotype in Human Urothelial Carcinoma of the Bladder."</b></p> <p>Author(s):Itami Y,Miyake M,Ohnishi S,Tatsumi Y,Gotoh D,Hori S,Morizawa Y,Iida K,Ohnishi K,Nakai Y,Inoue T,Anai S,Tanaka N,Fujii T,Shimada K,Furuya H,Khadka VS,Deng Y,Fujimoto K</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.3390/diagnostics10010054">http://dx.doi.org/10.3390/diagnostics10010054</a></p>
	33-3900 was used in Immunofluorescence-cell culture cells to investigate the effect of PFOS on Sertoli cell blood-testis barrier, showing that injury occurs via Akt1/2 and disrupts F-actin and microtubule organization.
Rat / 1:200	<p>Scientific reports (Apr 2017; 7: )</p> <p><b>"Perfluorooctanesulfonate (PFOS)-induced Sertoli cell injury through a disruption of F-actin and microtubule organization is mediated by Akt1/2."</b></p> <p>Author(s):Gao Y,Chen H,Xiao X,Lui WY,Lee WM,Mruk DD,Cheng CY</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1038/s41598-017-01016-8">http://dx.doi.org/10.1038/s41598-017-01016-8</a></p>
	33-3900 was used in Western Blotting to investigate the expression and functional role of fibroblast growth factor 18 in gastric cancer and elucidate its regulatory mechanisms.
Human / 1:1,000	<p>Oncogene (Jan 2019; 38: 33)</p> <p><b>"FGF18, a prominent player in FGF signaling, promotes gastric tumorigenesis through autocrine manner and is negatively regulated by miR-590-5p."</b></p> <p>Author(s):Zhang J,Zhou Y,Huang T,Wu F,Pan Y,Dong Y,Wang Y,Chan AKY,Liu L,Kwan JSH,Cheung AHK,Wong CC,Lo AKF,Cheng ASL,Yu J,Lo KW,Kang W,To KF</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1038/s41388-018-0430-x">http://dx.doi.org/10.1038/s41388-018-0430-x</a></p>
	33-3900 was used in Western Blotting to demonstrate that TGFβ drives the treatment resistant phenotype (MITFlow /AXLhigh) and contributes to MHC class I downregulation in melanoma.
Human / 1:2000	<p>Nature communications (Apr 2020; 11: )</p> <p><b>"Transcriptional downregulation of MHC class I and melanoma de- differentiation in resistance to PD-1 inhibition."</b></p> <p>Author(s):Lee JH,Shklovskaya E,Lim SY,Carlino MS,Menzies AM,Stewart A,Pedersen B,Irvine M,Alavi S,Yang JYH,Strbenac D,Saw RPM,Thompson JF,Wilmott JS,Scolyer RA,Long GV,Kefford RF,Rizos H</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1038/s41467-020-15726-7">http://dx.doi.org/10.1038/s41467-020-15726-7</a></p>
	33-3900 was used in western blot to determine the functional effects of S368 phosphorylation of connexin 43.
Non-human primate / Not Cited	<p>Journal of cardiovascular electrophysiology (Jan 2016; 27: 110)</p> <p><b>"Phosphorylation at Connexin43 Serine-368 Is Necessary for Myocardial Conduction During Metabolic Stress."</b></p> <p>Author(s):Nassal MM,Werdich AA,Wan X,Hoshi M,Deschênes I,Rosenbaum DS,Donahue JK</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1111/jce.12833">http://dx.doi.org/10.1111/jce.12833</a></p>
	33-3900 was used in western blot to determine the role of mammary epithelial cell NF-kappaB signaling in tumor progression in vivo.
Human / Not Cited	<p>Cancer research (Dec 2010; 70: 10464)</p> <p><b>"The canonical NF-kappaB pathway governs mammary tumorigenesis in transgenic mice and tumor stem cell expansion."</b></p> <p>Author(s):Liu M,Sakamaki T,Casimiro MC,Willmarth NE,Quong AA,Ju X,Ojeifo J,Jiao X,Yeow WS,Katiyar S,Shirley LA,Joyce D,Lisanti MP,Albanese C,Pestell RG</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1158/0008-5472.CAN-10-0732">http://dx.doi.org/10.1158/0008-5472.CAN-10-0732</a></p>
	33-3900 was used in western blot to find that basic fibroblast growth factor downregulates typical cadherin expression on the surface of human umbilical vein endothelial cells via FGF receptor 1 signaling
Not Applicable / Not Cited	<p>Experimental cell research (Feb 2008; 314: 421)</p> <p><b>"JNK signaling pathway is required for bFGF-mediated surface cadherin downregulation on HUVEC."</b></p> <p>Author(s):Wu JC,Yan HC,Chen WT,Chen WH,Wang CJ,Chi YC,Kao WY</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1016/j.yexcr.2007.10.002">http://dx.doi.org/10.1016/j.yexcr.2007.10.002</a></p>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

Mouse / Not Cited	<p>FASEB journal : official publication of the Federation of American Societies for Experimental Biology (Feb 2012; 26: 503)  <b>"Cadherin-11 contributes to pulmonary fibrosis: potential role in TGF- production and epithelial to mesenchymal transition."</b>            Author(s):Schneider DJ,Wu M,Le TT,Cho SH,Brenner MB,Blackburn MR,Agarwal SK            PubMed Article URL:<a href="http://dx.doi.org/10.1096/fj.11-186098">http://dx.doi.org/10.1096/fj.11-186098</a></p>
Mouse / Not Cited	<p>Nature medicine (Dec 2010; 16: 1414)  <b>"Monoclonal antibody targeting of N-cadherin inhibits prostate cancer growth, metastasis and castration resistance."</b>            Author(s):Tanaka H,Kono E,Tran CP,Miyazaki H,Yamashiro J,Shimomura T,Fazli L,Wada R,Huang J,Vessella RL,An J,Horvath S,Gleave M,Rettig MB,Wainberg ZA,Reiter RE            PubMed Article URL:<a href="http://dx.doi.org/10.1038/nm.2236">http://dx.doi.org/10.1038/nm.2236</a></p>
Zebrafish / Not Cited	<p>33-3900 was used in Western Blotting to indicate that miR-132 acts as an intercellular signal mediating neural regulation of the brain vascular integrity.</p>
Rat / Not Cited	<p>Cell research (Jul 2017; 27: 882)  <b>"Neurons secrete miR-132-containing exosomes to regulate brain vascular integrity."</b>            Author(s):Xu B,Zhang Y,Du XF,Li J,Zi HX,Bu JW,Yan Y,Han H,Du JL            PubMed Article URL:<a href="http://dx.doi.org/10.1038/cr.2017.62">http://dx.doi.org/10.1038/cr.2017.62</a></p>
Hamster / Not Cited	<p>Journal of cell science (Jan 2003; 116: 377)  <b>"Alpha5beta1 integrin mediates strong tissue cohesion."</b>            Author(s):Robinson EE,Zazzali KM,Corbett SA,Foty RA            PubMed Article URL:<a href="http://dx.doi.org/10.1242/jcs.00231">http://dx.doi.org/10.1242/jcs.00231</a></p>
Human / Not Cited	<p>33-3900 was used in Western Blotting to examine the effects of chronic inhalation of potential toxicants emitted by ecigarettes, and compare the risks with combustible cigarettes.</p>
Human / Not Cited	<p>Scientific reports (Oct 2017; 7: )  <b>"Electronic Cigarette Smoke Impairs Normal Mesenchymal Stem Cell Differentiation."</b>            Author(s):Shaito A,Saliba J,Husari A,El-Harakeh M,Chhourri H,Hashem Y,Shihadeh A,El-Sabban M            PubMed Article URL:<a href="http://dx.doi.org/10.1038/s41598-017-14634-z">http://dx.doi.org/10.1038/s41598-017-14634-z</a></p>
Not Applicable / 0.1 µg/ml	<p>33-3900 was used in western blot to test if aconitine affects connexin43 phosphorylation and intracellular calcium oscillation patterns in cultured ventricular myocytes of neonatal rats</p>
Not Applicable / 0.1 µg/ml	<p>Toxicology in vitro : an international journal published in association with BIBRA (Dec 2007; 21: 1476)  <b>"Aconitine alters connexin43 phosphorylation status and [Ca2+] oscillation patterns in cultured ventricular myocytes of neonatal rats."</b>            Author(s):Zhang SW,Liu Y,Huang GZ,Liu L            PubMed Article URL:<a href="http://dx.doi.org/10.1016/j.tiv.2007.06.013">http://dx.doi.org/10.1016/j.tiv.2007.06.013</a></p>
Rat / Not Cited	<p>FASEB journal : official publication of the Federation of American Societies for Experimental Biology (Jun 2008; 22: 1945)  <b>"Blood-testis barrier dynamics are regulated by testosterone and cytokines via their differential effects on the kinetics of protein endocytosis and recycling in Sertoli cells."</b>            Author(s):Yan HH,Mruk DD,Lee WM,Cheng CY            PubMed Article URL:<a href="http://dx.doi.org/10.1096/fj.06-070342">http://dx.doi.org/10.1096/fj.06-070342</a></p>
Human / Not Cited	<p>333900 was used in immunocytochemistry and western blot to investigate the alternative splicing of E-cadherin mRNA</p>
Human / Not Cited	<p>Journal of cellular physiology (Jun 2017; 232: 1368)  <b>"Identification of a Novel Human E-Cadherin Splice Variant and Assessment of Its Effects Upon EMT-Related Events."</b>            Author(s):Matos ML,Lapyckyj L,Rosso M,Besso MJ,Mencucci MV,Briggiler CI,Giustina S,Furlong LI,Vazquez-Levin MH            PubMed Article URL:<a href="http://dx.doi.org/10.1002/jcp.25622">http://dx.doi.org/10.1002/jcp.25622</a></p>
Human / Not Cited	<p>33-3900 was used in western blot to compare the histological, biological, and molecular features of 2D and 3D epithelial ovarian cancer cultures.</p>
Human / Not Cited	<p>Laboratory investigation; a journal of technical methods and pathology (May 2013; 93: 528)  <b>"A three-dimensional microenvironment alters protein expression and chemosensitivity of epithelial ovarian cancer cells in vitro."</b>            Author(s):Lee JM,Mhawech-Fauceglia P,Lee N,Parsanian LC,Lin YG,Gayther SA,Lawrenson K            PubMed Article URL:<a href="http://dx.doi.org/10.1038/labinvest.2013.41">http://dx.doi.org/10.1038/labinvest.2013.41</a></p>
Human / Not Cited	<p>33-3900 was used in Western Blotting to investigate the mechanism by which cIAP2 regulates the epithelial-mesenchymal transition in triple negative breast cancer cells.</p>
Human / Not Cited	<p>Oncotarget (Oct 2017; 8: 78781)  <b>"Cellular inhibitor of apoptosis protein 2 promotes the epithelial-mesenchymal transition in triple-negative breast cancer cells through activation of the AKT signaling pathway."</b>            Author(s):Jo SJ,Park PG,Cha HR,Ahn SG,Kim MJ,Kim H,Koo JS,Jeong J,Park JH,Dong SM,Lee JM            PubMed Article URL:<a href="http://dx.doi.org/10.18632/oncotarget.20227">http://dx.doi.org/10.18632/oncotarget.20227</a></p>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	33-3900 was used in Immunohistochemistry (Paraffin), Western Blot to demonstrate that FAM83H-AS1 upregulates ULK3 expression through the transcription factor c-Myc and promotes the progression of BCa.
Human / Not Cited	Cell cycle (Georgetown, Tex.) (Dec 2020; 19: 3546) <b>"Promoting roles of long non-coding RNA FAM83H-AS1 in bladder cancer growth, metastasis, and angiogenesis through the c-Myc-mediated ULK3 upregulation."</b> Author(s):Liu B,Gao W,Sun W,Li L,Wang C,Yang X,Liu J,Guo Y PubMed Article URL: <a href="http://dx.doi.org/10.1080/15384101.2020.1850971">http://dx.doi.org/10.1080/15384101.2020.1850971</a>
	333900 was used in immunocytochemistry and western blot to explore how laminin2 in the basement membrane modulates the blood testis barrier dynamics during spermatogenesis
Rat / 1:200	FASEB journal : official publication of the Federation of American Societies for Experimental Biology (Feb 2017; 31: 584) <b>"Regulation of the blood-testis barrier by a local axis in the testis: role of laminin 2 in the basement membrane."</b> Author(s):Gao Y,Mruk D,Chen H,Lui WY,Lee WM,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1096/fj.201600870R">http://dx.doi.org/10.1096/fj.201600870R</a>
	33-3900 was used in Western Blotting to find that transforming growth factor beta-1, a well-known EMT inducer, is associated with EVs and mediates the EMT cascade induced in the A549 cells.
Human / 1:1000	Respiratory research (May 2020; 21: ) <b>"Extracellular vesicles from mast cells induce mesenchymal transition in airway epithelial cells."</b> Author(s):Yin Y,Shelke GV,Lässer C,Brismar H,Lötvall J PubMed Article URL: <a href="http://dx.doi.org/10.1186/s12931-020-01346-8">http://dx.doi.org/10.1186/s12931-020-01346-8</a>
	33-3900 was used in Western Blotting to describe the role of microRNA-661 as an epigenetic regulator of colon cancer cell metabolism.
Human / Not Cited	Molecular oncology (Dec 2017; 11: 1768) <b>"MicroRNA-661 modulates redox and metabolic homeostasis in colon cancer."</b> Author(s):Gómez de Cedrón M,Acín Pérez R,Sánchez-Martínez R,Molina S,Herranz J,Feliu J,Reglero G,Enríquez JA, Ramírez de Molina A PubMed Article URL: <a href="http://dx.doi.org/10.1002/1878-0261.12142">http://dx.doi.org/10.1002/1878-0261.12142</a>
	33-3900 was used in Western Blotting to show that H/R treatment promoted miR-133 expression in EPCs and EPC-derived exosomes.
Human / 1:1000	Stem cell research & therapy (Aug 2019; 10: ) <b>"YBX-1 mediated sorting of miR-133 into hypoxia/reoxygenation-induced EPC-derived exosomes to increase fibroblast angiogenesis and MEndoT."</b> Author(s):Lin F,Zeng Z,Song Y,Li L,Wu Z,Zhang X,Li Z,Ke X,Hu X PubMed Article URL: <a href="http://dx.doi.org/10.1186/s13287-019-1377-8">http://dx.doi.org/10.1186/s13287-019-1377-8</a>
	33-3900 was used in Western Blot to demonstrate a critical role of presynaptic cadherin/catenin cell adhesion complexes in stabilising functional synapses and spines in the developing neocortex.
Mouse / Not Cited	Neuron (Jun 2017; 94: 1155) <b>"A Critical Role of Presynaptic Cadherin/Catenin/p140Cap Complexes in Stabilizing Spines and Functional Synapses in the Neocortex."</b> Author(s):Li MY,Miao WY,Wu QZ,He SJ,Yan G,Yang Y,Liu JJ,Taketo MM,Yu X PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.neuron.2017.05.022">http://dx.doi.org/10.1016/j.neuron.2017.05.022</a>
	33-3900 was used in western blot to investigate the beta-integrin/laminin gamma3 complex, MMP-2, MT-MMP and TIMP-2 at the apical ectoplasmic specialization.
Rat / Not Cited	Biology of reproduction (Apr 2004; 70: 945) <b>"Interactions of proteases, protease inhibitors, and the beta1 integrin/laminin gamma3 protein complex in the regulation of ectoplasmic specialization dynamics in the rat testis."</b> Author(s):Siu MK,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1095/biolreprod.103.023606">http://dx.doi.org/10.1095/biolreprod.103.023606</a>
	33-3900 was used in immunohistochemistry - paraffin section, immunoprecipitation, and western blot to study the effect of flutamide on the distribution of c-Src and the N-cadherin-beta-catenin complex in the seminiferous epithelium of adult rat
Rat / 1:1000	Andrology (May 2015; 3: 569) <b>"Flutamide alters the distribution of c-Src and affects the N-cadherin--catenin complex in the seminiferous epithelium of adult rat."</b> Author(s):Zarzycka M,Chojnacka K,Mruk DD,Gorowska E,Hejmej A,Kotula-Balak M,Pardyak L,Bilinska B PubMed Article URL: <a href="http://dx.doi.org/10.1111/andr.12028">http://dx.doi.org/10.1111/andr.12028</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.



	33-3900 was used in Western Blotting to study the role of the mechanosensitive 2-pore K(+) channel family member, TREK-1, in the control of cardiac excitability.
Mouse / Not Cited	Journal of the American Heart Association (Apr 2016; 5: ) <b>"Two-Pore K+ Channel TREK-1 Regulates Sinoatrial Node Membrane Excitability."</b> Author(s):Unudurthi SD,Wu X,Qian L,Amari F,Onal B,Li N,Makara MA,Smith SA,Snyder J,Fedorov VV,Coppola V, Anderson ME,Mohler PJ,Hund TJ PubMed Article URL: <a href="http://dx.doi.org/10.1161/JAHA.115.002865">http://dx.doi.org/10.1161/JAHA.115.002865</a>
	33-3900 was used in Western Blotting and IHC/IF to elucidate the regulation of blood-testis barrier dynamics by alpha(2)-macroglobulin.
Rat / 1:250	Endocrinology (Apr 2005; 146: 1893) <b>"Blood-testis barrier dynamics are regulated by {alpha}2-macroglobulin via the c-Jun N-terminal protein kinase pathway."</b> Author(s):Wong CH,Mruk DD,Siu MK,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1210/en.2004-1464">http://dx.doi.org/10.1210/en.2004-1464</a>
	33-3900 was used in immunohistochemistry and western blot to generate and characterize a novel rabbit corneal endothelial cell line.
Rabbit / Not Cited	Journal of tissue engineering and regenerative medicine (Apr 2017; 11: 1057) <b>"Spontaneous acquisition of infinite proliferative capacity by a rabbit corneal endothelial cell line with maintenance of phenotypic and physiological characteristics."</b> Author(s):Kageyama T,Hayashi R,Hara S,Yoshikawa K,Ishikawa Y,Yamato M,Nishida K PubMed Article URL: <a href="http://dx.doi.org/10.1002/term.2005">http://dx.doi.org/10.1002/term.2005</a>
	33-3900 was used in Western Blotting to demonstrate the participation of RAB-13 in the dynamics of ectoplasmic specialisation in the testis.
Rat / Not Cited	Biology of reproduction (Mar 2009; 80: 590) <b>"RAB13 participates in ectoplasmic specialization dynamics in the rat testis."</b> Author(s):Mruk DD,Lau AS PubMed Article URL: <a href="http://dx.doi.org/10.1095/biolreprod.108.071647">http://dx.doi.org/10.1095/biolreprod.108.071647</a>
	33-3900 was used in western blot to propose that a paucity of pericytes in the germinal matrix vasculature contributes to its propensity to hemorrhage
Not Applicable / Not Cited	The Journal of neuroscience : the official journal of the Society for Neuroscience (Oct 2007; 27: 12012) <b>"Paucity of pericytes in germinal matrix vasculature of premature infants."</b> Author(s):Braun A,Xu H,Hu F,Kocherlakota P,Siegel D,Chander P,Ungvari Z,Csiszar A,Nedergaard M,Ballabh P PubMed Article URL: <a href="http://dx.doi.org/10.1523/JNEUROSCI.3281-07.2007">http://dx.doi.org/10.1523/JNEUROSCI.3281-07.2007</a>
	33-3900 was used in Western Blotting to highlight the translational potential of FGFR2-c-Jun-YAP1 axis, which may serve as a prognostic biomarker and therapeutic target for GC.
Human / Not Cited	Oncogene (Oct 2020; 39: 6647) <b>"FGF18-FGFR2 signaling triggers the activation of c-Jun-YAP1 axis to promote carcinogenesis in a subgroup of gastric cancer patients and indicates translational potential."</b> Author(s):Zhang J,Wong CC,Leung KT,Wu F,Zhou Y,Tong JHM,Chan RCK,Li H,Wang Y,Yan H,Liu L,Wu WKK,Chan MWY,Cheng ASL,Yu J,Wong N,Lo KW,To KF,Kang W PubMed Article URL: <a href="http://dx.doi.org/10.1038/s41388-020-01458-x">http://dx.doi.org/10.1038/s41388-020-01458-x</a>
	33-3900 was used in Immunohistochemistry-immunofluorescence to evidence for targeted activation of the WNT/-catenin pathway as a potential treatment for this disease.
Mouse / 1:1000	The Journal of clinical investigation (Jul 2019; 129: 3171) <b>"Ankyrin-B dysfunction predisposes to arrhythmogenic cardiomyopathy and is amenable to therapy."</b> Author(s):Roberts JD,Murphy NP,Hamilton RM,Lubbers ER,James CA,Kline CF,Gollob MH,Krahn AD,Sturm AC,Musa H, El-Refaey M,Koenig S,Aneq MA,Hoorntje ET,Graw SL,Davies RW,Rafiq MA,Koopmann TT,Aafaqi S,Fatah M,Chiasson DA,Taylor MR,Simmons SL,Han M,van Opbergen CJ,Wold LE,Sinagra G,Mittal K,Tichnell C,Murray B,Codima A,Nazer B, Nguyen DT,Marcus FI,Sobriera N,Lodder EM,van den Berg MP,Spears DA,Robinson JF,Ursell PC,Green AK,Skanes AC, Tang AS,Gardner MJ,Hegele RA,van Veen TA,Wilde AA,Healey JS,Janssen PM,Mestroni L,van Tintelen JP,Calkins H, Judge DP,Hund TJ,Scheinman MM,Mohler PJ PubMed Article URL: <a href="http://dx.doi.org/10.1172/JCI125538">http://dx.doi.org/10.1172/JCI125538</a>
	33-3900 was used in Western Blotting to show that expression of Cx26 in HeLa cells specifically enhances cell motility in scrape wounding and sparse culture models.
Human / Not Cited	Journal of cell science (Dec 2016; 129: 4399) <b>"Cell coupling mediated by connexin 26 selectively contributes to reduced adhesivity and increased migration."</b> Author(s):Polusani SR,Kalmykov EA,Chandrasekhar A,Zucker SN,Nicholson BJ PubMed Article URL: <a href="http://dx.doi.org/10.1242/jcs.185017">http://dx.doi.org/10.1242/jcs.185017</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	33-3900 was used in Western Blotting to show how ANCR promoted HCC metastasis by upregulating HNRNPA1, inhibiting HNRNPA1 degradation and sponging miR-140-3p.
Human / 1:1000	RNA biology (Mar 2020; 17: 381) <b>"LncRNA ANCR promotes hepatocellular carcinoma metastasis through upregulating HNRNPA1 expression."</b> Author(s):Wen Z,Lian L,Ding H,Hu Y,Xiao Z,Xiong K,Yang Q PubMed Article URL: <a href="http://dx.doi.org/10.1080/15476286.2019.1708547">http://dx.doi.org/10.1080/15476286.2019.1708547</a>
	33-3900 was used in Western Blotting to investigate the molecular function of Transforming Growth Factor beta 1 in controlling cell-cell adhesion in the heart.
Mouse / Not Cited	Journal of molecular and cellular cardiology (Nov 2017; 112: 49) <b>"TGF-1 affects cell-cell adhesion in the heart in an NCAM1-dependent mechanism."</b> Author(s):Ackermann MA,Petrosino JM,Manring HR,Wright P,Shettigar V,Kilic A,Janssen PML,Ziolo MT,Accornero F PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.jymcc.2017.08.015">http://dx.doi.org/10.1016/j.jymcc.2017.08.015</a>
	33-3900 was used in Western Blotting to identify Protogenin (PRTG) was upregulated in both gastric cancer tissues and H. pylori-infected tissues by analyzing dysregulated genes in TCGA and GEO databases.
Human / Not Cited	Cell death & disease (Feb 2021; 12: ) <b>"The novel ZEB1-upregulated protein PRTG induced by Helicobacter pylori infection promotes gastric carcinogenesis through the cGMP/PKG signaling pathway."</b> Author(s):Xiang T,Yuan C,Guo X,Wang H,Cai Q,Xiang Y,Luo W,Liu G PubMed Article URL: <a href="http://dx.doi.org/10.1038/s41419-021-03440-1">http://dx.doi.org/10.1038/s41419-021-03440-1</a>
	33-3900 was used in western blot to report that Notch1 signaling drives the vertical growth phase of primary melanoma
Not Applicable / Not Cited	Cancer research (Apr 2006; 66: 4182) <b>"Notch1 signaling promotes primary melanoma progression by activating mitogen-activated protein kinase /phosphatidylinositol 3-kinase-Akt pathways and up-regulating N-cadherin expression."</b> Author(s):Liu ZJ,Xiao M,Balint K,Smalley KS,Brafford P,Qiu R,Pinnix CC,Li X,Herlyn M PubMed Article URL: <a href="http://dx.doi.org/10.1158/0008-5472.CAN-05-3589">http://dx.doi.org/10.1158/0008-5472.CAN-05-3589</a>
Tag / Not Cited	The Journal of biological chemistry (May 2005; 280: 19925) <b>"Connexin43 associated with an N-cadherin-containing multiprotein complex is required for gap junction formation in NIH3T3 cells."</b>
Mouse / Not Cited	Author(s):Wei CJ,Francis R,Xu X,Lo CW PubMed Article URL: <a href="http://dx.doi.org/10.1074/jbc.M412921200">http://dx.doi.org/10.1074/jbc.M412921200</a>
	33-3900 was used in Western Blot to determine the pathological impact of phospholipase C 1 (PLC1) in glioblastoma, confirming that PLC1 gene expression correlates with glioma's grade.
Human / Not Cited	Cellular and molecular life sciences : CMLS (Mar 2022; 79: ) <b>"Impact of phospholipase C 1 in glioblastoma: a study on the main mechanisms of tumor aggressiveness."</b> Author(s):Ratti S,Marvi MV,Mongiorgi S,Obeng EO,Rusciano I,Ramazzotti G,Morandi L,Asioli S,Zoli M,Mazzatenta D,Suh PG,Manzoli L,Cocco L PubMed Article URL: <a href="http://dx.doi.org/10.1007/s00018-022-04198-1">http://dx.doi.org/10.1007/s00018-022-04198-1</a>
	33-3900 was used in Western Blotting to show that enhancement in FDPS level is observed in glioma tissues and associate with poor prognosis, contributed to tumour growth.
Human / Not Cited	Journal of cellular and molecular medicine (Aug 2020; 24: 9055) <b>"FDPS promotes glioma growth and macrophage recruitment by regulating CCL20 via Wnt/-catenin signalling pathway."</b> Author(s):Chen Z,Chen G,Zhao H PubMed Article URL: <a href="http://dx.doi.org/10.1111/jcmm.15542">http://dx.doi.org/10.1111/jcmm.15542</a>
	33-3900 was used in Western Blotting to show that p68 promotes breast cancer cell EMT and cell migration by upregulation of PDGF receptor (PDGFR-).
Human / Not Cited	Journal of Cancer (Oct 2021; 12: 6543) <b>"P68 RNA Helicase facilitates Breast Cancer progression by promoting Proliferation and Migration via PDGFR- /AR axis."</b> Author(s):Panchbhai N,Turaga RC,Sharma M,Satyanarayana G,Liu ZR PubMed Article URL: <a href="http://dx.doi.org/10.7150/jca.61505">http://dx.doi.org/10.7150/jca.61505</a>
	33-3900 was used in Western Blot to provide evidence for an alternative therapeutic strategy with anti-Sema4D to complement or improve the current treatment of DR.
Mouse / 1:1000	EMBO molecular medicine (Feb 2020; 12: ) <b>"Inhibition of Sema4D/PlexinB1 signaling alleviates vascular dysfunction in diabetic retinopathy."</b> Author(s):Wu JH,Li YN,Chen AQ,Hong CD,Zhang CL,Wang HL,Zhou YF,Li PC,Wang Y,Mao L,Xia YP,He QW,Jin HJ,Yue ZY,Hu B PubMed Article URL: <a href="http://dx.doi.org/10.15252/emmm.201810154">http://dx.doi.org/10.15252/emmm.201810154</a>

### 43 Immunohistochemistry References

Species / Dilution	Summary
--------------------	---------

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	33-3900 was used in Western Blotting to study the effect of hypothermia on gap junction coupling and Na <sup>+</sup> channel function in acute cardiac ischemia.
Dog / 1:1000	American journal of physiology. Heart and circulatory physiology (May 2017; 312: H886) <b>"Mild hypothermia preserves myocardial conduction during ischemia by maintaining gap junction intracellular communication and Na<sup>+</sup> channel function."</b> Author(s): Nassal MMJ, Wan X, Dale Z, Deschênes I, Wilson LD, Piktet JS PubMed Article URL: <a href="http://dx.doi.org/10.1152/ajpheart.00298.2016">http://dx.doi.org/10.1152/ajpheart.00298.2016</a>
Pig / 1:25	33-3900 was used in Immunohistochemistry to characterize the neuropathology in a pig model of acquired hydrocephalus by analyzing the proliferative cells in the subventricular zone, periventricular white matter alterations, and markers of neuroinflammation in the brain parenchyma and cerebrospinal fluid. Fluids and barriers of the CNS (Feb 2022; 19: ) <b>"Acquired hydrocephalus is associated with neuroinflammation, progenitor loss, and cellular changes in the subventricular zone and periventricular white matter."</b> Author(s): Garcia-Bonilla M, Castaneyra-Ruiz L, Zwick S, Talcott M, Otun A, Isaacs AM, Morales DM, Limbrick DD, McAllister JP PubMed Article URL: <a href="http://dx.doi.org/10.1186/s12987-022-00313-3">http://dx.doi.org/10.1186/s12987-022-00313-3</a>
Rat / 1:100	33-3900 was used in Immunohistochemistry-immunofluorescence to characterise the laminin chains expressed in cells of the seminiferous epithelium in the rat testes. The Journal of biological chemistry (Jun 2006; 281: 17286) <b>"Laminin alpha 3 forms a complex with beta3 and gamma3 chains that serves as the ligand for alpha 6beta1-integrin at the apical ectoplasmic specialization in adult rat testes."</b> Author(s): Yan HHN, Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1074/jbc.M513218200">http://dx.doi.org/10.1074/jbc.M513218200</a>
Mouse / Not Cited	33-3900 was used in Immunohistochemistry to generate three-dimensional lineage mapping of AV and PV cusps during intercalated cushion development. Developmental dynamics : an official publication of the American Association of Anatomists (Aug 2018; 247: 1005) <b>"Intercalated cushion cells within the cardiac outflow tract are derived from the myocardial troponin T type 2 (Tnnt2) Cre lineage."</b> Author(s): Mifflin JJ, Dupuis LE, Alcalá NE, Russell LG, Kern CB PubMed Article URL: <a href="http://dx.doi.org/10.1002/dvdy.24641">http://dx.doi.org/10.1002/dvdy.24641</a>
Rat / Not Cited	33-3900 was used in Immunohistochemistry to demonstrate that nitric oxide-sensitive soluble guanylyl cyclase stimulation is effective in improving several heart failure with preserved ejection fraction facets. JCI insight (Feb 2018; 3: ) <b>"Nitric oxide-sensitive guanylyl cyclase stimulation improves experimental heart failure with preserved ejection fraction."</b> Author(s): Wilck N, Markó L, Balogh A, Kräker K, Herse F, Bartolomeaus H, Szijártó IA, Gollasch M, Reichhart N, Strauss O, Heuser A, Brockschneider D, Kretschmer A, Lesche R, Sohler F, Stasch JP, Sandner P, Luft FC, Müller DN, Dechend R, Haase N PubMed Article URL: <a href="http://dx.doi.org/10.1172/jci.insight.96006">http://dx.doi.org/10.1172/jci.insight.96006</a>
Mouse / 1:250	33-3900 was used in Immunohistochemistry-immunofluorescence to investigate the cytoskeletal and signalling roles of beta-catenin during the early phases of lens development. Developmental biology (Sep 2005; 285: 477) <b>"The duality of beta-catenin function: a requirement in lens morphogenesis and signaling suppression of lens fate in periocular ectoderm."</b> Author(s): Smith AN, Miller LA, Song N, Taketo MM, Lang RA PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.ydbio.2005.07.019">http://dx.doi.org/10.1016/j.ydbio.2005.07.019</a>
Mouse / 1:250	33-3900 was used in Immunocytochemistry, Immunohistochemistry (Paraffin), Immunoprecipitation, Western Blot to show that meningeal lymphatic networks are affected in craniosynostosis, suggesting that the clearance of -amyloid and waste from the central nervous system may be impeded. Development (Cambridge, England) (Jan 2022; 149: ) <b>"The growth and expansion of meningeal lymphatic networks are affected in craniosynostosis."</b> Author(s): Ang PS, Matrongolo MJ, Tischfield MA PubMed Article URL: <a href="http://dx.doi.org/10.1242/dev.200065">http://dx.doi.org/10.1242/dev.200065</a>
Mouse / Not Cited	33-3900 was used in Immunohistochemistry to suggest that CXCR5 maintains PI3K/AKT signalling, regulating the expression of genes involved in retinal pigment epithelium epithelial-mesenchymal transition and deregulation. Laboratory investigation; a journal of technical methods and pathology (Feb 2021; 101: 228) <b>"Deficiency of C-X-C chemokine receptor type 5 (CXCR5) gene causes dysfunction of retinal pigment epithelium cells."</b> Author(s): Lennikov A, Mukwaya A, Saddala MS, Huang H PubMed Article URL: <a href="http://dx.doi.org/10.1038/s41374-020-00491-4">http://dx.doi.org/10.1038/s41374-020-00491-4</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCT IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	33-3900 was used in Immunohistochemistry-immunofluorescence to study the role of Dishevelled 3 in supporting Sertoli cell tight junction-permeability barrier function.
Rat / 1:100	Cell death & disease (Feb 2019; 10: ) <b>"Planar cell polarity protein Dishevelled 3 (Dvl3) regulates ectoplasmic specialization (ES) dynamics in the testis through changes in cytoskeletal organization."</b> Author(s):Li L,Mao B,Yan M,Wu S,Ge R,Lian Q,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1038/s41419-019-1394-7">http://dx.doi.org/10.1038/s41419-019-1394-7</a>
Rhesus monkey / Not Cited Rabbit / Not Cited	33-3900 was used in Immunohistochemistry to evaluate the efficacy of cryopreserved human embryonic stem cell (hESC)-derived corneal endothelial cells (CECs) to form a functional monolayer of corneal endothelium (CE) in rabbits and monkeys. Stem cell reports (Sep 2021; 16: 2320) <b>"Pluripotent stem cell-derived corneal endothelial cells as an alternative to donor corneal endothelium in keratoplasty."</b> Author(s):Ali M,Khan SY,Gottsch JD,Hutchinson EK,Khan A,Riazuddin SA PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.stemcr.2021.07.008">http://dx.doi.org/10.1016/j.stemcr.2021.07.008</a>
Mouse / Not Cited	33-3900 was used in Immunohistochemistry to develop a detailed protocol for both in vitro and in vivo induced cardiomyocyte generation. Methods in molecular biology (Clifton, N.J.) (Jan 2018; 1521: 69) <b>"Direct Cardiac Reprogramming as a Novel Therapeutic Strategy for Treatment of Myocardial Infarction."</b> Author(s):Ma H,Wang L,Liu J,Qian L PubMed Article URL: <a href="http://dx.doi.org/10.1007/978-1-4939-6588-5_5">http://dx.doi.org/10.1007/978-1-4939-6588-5_5</a>
Mouse / Not Cited	33-3900 was used in Immunohistochemistry to determine the role of ZO-1 in cardiac function. Circulation research (Jul 2020; 127: e28) <b>"ZO-1 Regulates Intercalated Disc Composition and Atrioventricular Node Conduction."</b> Author(s):Dai W,Nadadur RD,Brennan JA,Smith HL,Shen KM,Gadek M,Laforest B,Wang M,Gemel J,Li Y,Zhang J,Ziman BD,Yan J,Ai X,Beyer EC,Lakata EG,Kasthuri N,Efimov IR,Broman MT,Moskowitz IP,Shen L,Weber CR PubMed Article URL: <a href="http://dx.doi.org/10.1161/CIRCRESAHA.119.316415">http://dx.doi.org/10.1161/CIRCRESAHA.119.316415</a>
Rat / 1:100	33-3900 was used in Immunohistochemistry to investigate the role of dynein 1 in supporting the transport of spermatids and organelles across the seminiferous epithelium during spermatogenesis. American journal of physiology. Endocrinology and metabolism (Nov 2018; 315: E924) <b>"Dynein 1 supports spermatid transport and spermiation during spermatogenesis in the rat testis."</b> Author(s):Wen Q,Tang EI,Lui WY,Lee WM,Wong CKC,Silvestrini B,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1152/ajpendo.00114.2018">http://dx.doi.org/10.1152/ajpendo.00114.2018</a>
Mouse / Not Cited	33-3900 was used in Immunohistochemistry to show that S1P export from Mfsd2b and Spns2 is essential for developing and mature vasculature. Cell reports (Aug 2022; 40: ) <b>"Mfsd2b and Spns2 are essential for maintenance of blood vessels during development and in anaphylactic shock."</b> Author(s):Le TNU,Nguyen TQ,Kalailingam P,Nguyen YTK,Sukumar VK,Tan CKH,Tukijan F,Couty L,Hasan Z,Del Gaudio I,Wenk MR,Cazenave-Gassiot A,Camerer E,Nguyen LN PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.celrep.2022.111208">http://dx.doi.org/10.1016/j.celrep.2022.111208</a>
Mouse / Not Cited	33-3900 was used in Immunohistochemistry-immunofluorescence to study the mechanistic role of all spectrin in the vertebrate heart. The Journal of biological chemistry (Jun 2019; 294: 9576) <b>"Defining new mechanistic roles for II spectrin in cardiac function."</b> Author(s):Lubbers ER,Murphy NP,Musa H,Huang CY,Gupta R,Price MV,Han M,Daoud E,Gratz D,El Refaey M,Xu X,Hoefflinger NK,Friel EL,Lancione P,Wallace MJ,Cavus O,Simmons SL,Williams JL,Skaf M,Koenig SN,Janssen PML,Rasband MN,Hund TJ,Mohler PJ PubMed Article URL: <a href="http://dx.doi.org/10.1074/jbc.RA119.007714">http://dx.doi.org/10.1074/jbc.RA119.007714</a>
Human / 1:100	33-3900 was used in immunohistochemistry to describe the magnetic levitation method of 3D cell culturing. Nature protocols (Oct 2013; 8: 1940) <b>"Three-dimensional cell culturing by magnetic levitation."</b> Author(s):Haisler WL,Timm DM,Gage JA,Tseng H,Killian TC,Souza GR PubMed Article URL: <a href="http://dx.doi.org/10.1038/nprot.2013.125">http://dx.doi.org/10.1038/nprot.2013.125</a>
Not Applicable / 1:125	33-3900 was used in immunohistochemistry to report on a case of pilomatrix carcinoma with lymph node metastases Journal of cutaneous pathology (Apr 2004; 31: 330) <b>"Pilomatrix carcinoma with lymph node metastases."</b> Author(s):Bassarova A,Nesland JM,Sedloev T,Danielsen H,Christova S PubMed Article URL: <a href="http://dx.doi.org/10.1111/j.0303-6987.2004.0178.x">http://dx.doi.org/10.1111/j.0303-6987.2004.0178.x</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.



	33-3900 was used in immunohistochemistry to examine connexin40 and connexin43 expression in mouse models of hypoxia and sleep apnea
Mouse / 1:200	BMC cell biology (Jan 2017; 18: ) <b>"Intermittent hypoxia causes NOX2-dependent remodeling of atrial connexins."</b> Author(s):Gemel J,Su Z,Gileles-Hillel A,Khalyfa A,Gozal D,Beyer EC PubMed Article URL: <a href="http://dx.doi.org/10.1186/s12860-016-0117-5">http://dx.doi.org/10.1186/s12860-016-0117-5</a>
	33-3900 was used in Immunohistochemistry to demonstrate that P-cadherin expression showed a strong correlation with high histologic grade, increased proliferation, c-erbB-2 and p53 expression, lack of estrogen receptor, and poor patient survival.
Human / 1:400	Clinical cancer research : an official journal of the American Association for Cancer Research (Aug 2005; 11: 5869) <b>"P-cadherin overexpression is an indicator of clinical outcome in invasive breast carcinomas and is associated with CDH3 promoter hypomethylation."</b> Author(s):Paredes J,Albergaria A,Oliveira JT,Jerónimo C,Milanezi F,Schmitt FC PubMed Article URL: <a href="http://dx.doi.org/10.1158/1078-0432.CCR-05-0059">http://dx.doi.org/10.1158/1078-0432.CCR-05-0059</a>
	33-3900 was used in Immunohistochemistry to demonstrate the requirement of drebrin in lens development and growth, with drebrin deficiency leading to impaired lens morphogenesis and microphthalmia.
Mouse / Not Cited	Developmental dynamics : an official publication of the American Association of Anatomists (Nov 2021; 250: 1600) <b>"Drebrin, an actin-binding protein, is required for lens morphogenesis and growth."</b> Author(s):Karnam S,Maddala R,Stiber JA,Rao PV PubMed Article URL: <a href="http://dx.doi.org/10.1002/dvdy.353">http://dx.doi.org/10.1002/dvdy.353</a>
Human / Not Cited	Oncogene (Oct 2005; 24: 6902) <b>"Gene expression in thyroid autonomous adenomas provides insight into their physiopathology."</b> Author(s):Wattel S,Mircescu H,Venet D,Burniat A,Franc B,Frank S,Andry G,Van Sande J,Rocmans P,Dumont JE,Detours V,Maenhaut C PubMed Article URL: <a href="http://dx.doi.org/10.1038/sj.onc.1208849">http://dx.doi.org/10.1038/sj.onc.1208849</a>
	333900 was used in immunohistochemistry to identify signaling pathways that mediate the EGF-induced epithelial to mesenchymal transition
Human / Not Cited	Journal of proteomics (Jan 2017; 151: 2) <b>"Proteomic analysis of ovarian cancer cells during epithelial-mesenchymal transition (EMT) induced by epidermal growth factor (EGF) reveals mechanisms of cell cycle control."</b> Author(s):Grassi ML,Palma CS,Thomé CH,Lanfredi GP,Poersch A,Faça VM PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.jprot.2016.06.009">http://dx.doi.org/10.1016/j.jprot.2016.06.009</a>
	33-3900 was used in Immunohistochemistry to demonstrate that Spire 1 is an ectoplasmic specialization regulator to support germ cell development during spermatogenesis.
Rat / 1:100	Cell death & disease (Feb 2018; 9: ) <b>"Actin nucleator Spire 1 is a regulator of ectoplasmic specialization in the testis."</b> Author(s):Wen Q,Li N,Xiao X,Lui WY,Chu DS,Wong CKC,Lian Q,Ge R,Lee WM,Silvestrini B,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1038/s41419-017-0201-6">http://dx.doi.org/10.1038/s41419-017-0201-6</a>
	33-3900 was used in Western Blotting and IHC/IF to elucidate the regulation of blood-testis barrier dynamics by alpha(2)-macroglobulin.
Rat / 1:250	Endocrinology (Apr 2005; 146: 1893) <b>"Blood-testis barrier dynamics are regulated by {alpha}2-macroglobulin via the c-Jun N-terminal protein kinase pathway."</b> Author(s):Wong CH,Mruk DD,Siu MK,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1210/en.2004-1464">http://dx.doi.org/10.1210/en.2004-1464</a>
Human / Not Cited	Human pathology (Dec 1995; 26: 1363) <b>"The differential expression of N-cadherin and E-cadherin distinguishes pleural mesotheliomas from lung adenocarcinomas."</b> Author(s):Peralta Soler A,Knudsen KA,Jaurand MC,Johnson KR,Wheelock MJ,Klein-Szanto AJ,Salazar H PubMed Article URL: <a href="http://dx.doi.org/10.1016/0046-8177(95)90302-x">http://dx.doi.org/10.1016/0046-8177(95)90302-x</a>
	33-3900 was used in immunohistochemistry and western blot to generate and characterize a novel rabbit corneal endothelial cell line.
Rabbit / Not Cited	Journal of tissue engineering and regenerative medicine (Apr 2017; 11: 1057) <b>"Spontaneous acquisition of infinite proliferative capacity by a rabbit corneal endothelial cell line with maintenance of phenotypic and physiological characteristics."</b> Author(s):Kageyama T,Hayashi R,Hara S,Yoshikawa K,Ishikawa Y,Yamato M,Nishida K PubMed Article URL: <a href="http://dx.doi.org/10.1002/term.2005">http://dx.doi.org/10.1002/term.2005</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	33-3900 was used in Immunohistochemistry-immunofluorescence to study the function of scaffolding protein ankyrin-G (AnkG) in lens development of mice.
Mouse / Not Cited	Developmental biology (Feb 2019; 446: 119) <b>"Ankyrin-G regulated epithelial phenotype is required for mouse lens morphogenesis and growth."</b> Author(s):Rasiah PK,Maddala R,Bennett V,Rao PV PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.ydbio.2018.12.016">http://dx.doi.org/10.1016/j.ydbio.2018.12.016</a>
	33-3900 was used in immunohistochemistry to explore the relationship between N-cadherin and connexin43 in the heart
Not Applicable / Not Cited	Journal of molecular and cellular cardiology (Mar 2008; 44: 597) <b>"N-cadherin haploinsufficiency affects cardiac gap junctions and arrhythmic susceptibility."</b> Author(s):Li J,Levin MD,Xiong Y,Petrenko N,Patel VV,Radice GL PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.yjmcc.2007.11.013">http://dx.doi.org/10.1016/j.yjmcc.2007.11.013</a>
	33-3900 was used in Immunohistochemistry-immunofluorescence to establish XEGs to explore heterotypic cellular interactions and their developmental consequences in vitro.
Mouse / 1:200	Journal of tissue engineering (Jul 2022; 13: ) <b>"A gastruloid model of the interaction between embryonic and extra-embryonic cell types."</b> Author(s):Bérenger-Currias NM,Mircea M,Adegeest E,van den Berg PR,Feliksik M,Hochane M,Idema T,Tans SJ,Semrau S PubMed Article URL: <a href="http://dx.doi.org/10.1177/20417314221103042">http://dx.doi.org/10.1177/20417314221103042</a>
	33-3900 was used in immunohistochemistry to test is c-met normalizes altered limbal stem cell marker patterns in diabetic corneas
Not Applicable / 1:20	Molecular vision (Jan 2012; 17: 2177) <b>"Alterations of epithelial stem cell marker patterns in human diabetic corneas and effects of c-met gene therapy."</b> Author(s):Saghizadeh M,Soleymani S,Harounian A,Bhakta B,Troyanovsky SM,Brunken WJ,Pellegrini G,Ljubimov AV PubMed Article URL: <a href="http://www.ncbi.nlm.nih.gov/pubmed/21866211">http://www.ncbi.nlm.nih.gov/pubmed/21866211</a>
	33-3900 was used in Immunohistochemistry-immunofluorescence to evidence for targeted activation of the WNT/-catenin pathway as a potential treatment for this disease.
Mouse / 1:100	The Journal of clinical investigation (Jul 2019; 129: 3171) <b>"Ankyrin-B dysfunction predisposes to arrhythmogenic cardiomyopathy and is amenable to therapy."</b> Author(s):Roberts JD,Murphy NP,Hamilton RM,Lubbers ER,James CA,Kline CF,Gollob MH,Krahn AD,Sturm AC,Musa H,El-Refaey M,Koenig S,Aneq MA,Hoorntje ET,Graw SL,Davies RW,Rafiq MA,Koopmann TT,Aafaqi S,Fatah M,Chiasson DA,Taylor MR,Simmons SL,Han M,van Opbergen CJ,Wold LE,Sinagra G,Mittal K,Tichnell C,Murray B,Codima A,Nazer B,Nguyen DT,Marcus FI,Sobriera N,Lodder EM,van den Berg MP,Spears DA,Robinson JF,Ursell PC,Green AK,Skanes AC,Tang AS,Gardner MJ,Hegele RA,van Veen TA,Wilde AA,Healey JS,Janssen PM,Mestroni L,van Tintelen JP,Calkins H,Judge DP,Hund TJ,Scheinman MM,Mohler PJ PubMed Article URL: <a href="http://dx.doi.org/10.1172/JCI125538">http://dx.doi.org/10.1172/JCI125538</a>
	33-3900 was used in Immunocytochemistry, Immunohistochemistry (Paraffin), Immunoprecipitation, Western Blot to evaluate the prognostic role of E-cadherin, N-cadherin, Aryl hydrocarbon receptor (AhR), and CD147 in different biological behaviours.
Human / 1:150	Journal of clinical medicine (Sep 2021; 10: ) <b>"Impact of Epithelial-Mesenchymal Immunophenotype on Local Aggressiveness in Papillary Thyroid Carcinoma Invading the Airway."</b> Author(s):Mandarano M,Andolfi M,Colella R,Monacelli M,Polistena A,Moretti S,Bellezza G,Puxeddu E,Sanguinetti A,Sidoni A,Avenia N,Puma F,Vannucci J PubMed Article URL: <a href="http://dx.doi.org/10.3390/jcm10194351">http://dx.doi.org/10.3390/jcm10194351</a>
	33-3900 was used in Immunohistochemistry-wholemount to identify soluble epoxide hydrolase as a key enzyme that initiates pericyte loss and breakdown of endothelial barrier function.
Mouse / 1:200	Nature (Dec 2017; 552: 248) <b>"Inhibition of soluble epoxide hydrolase prevents diabetic retinopathy."</b> Author(s):Hu J,Dziumbila S,Lin J,Bibli SI,Zukunft S,de Mos J,Awwad K,Frömel T,Jungmann A,Devraj K,Cheng Z,Wang L,Fausser S,Eberhart CG,Sodhi A,Hammock BD,Liebner S,Müller OJ,Glaubitz C,Hammes HP,Popp R,Fleming I PubMed Article URL: <a href="http://dx.doi.org/10.1038/nature25013">http://dx.doi.org/10.1038/nature25013</a>
	33-3900 was used in Immunohistochemistry to suggest that NSC-mediated neuron and glia production is regulated through the interplay of sequential Lgl1-dependent global and cell intrinsic mechanisms.
Mouse / Not Cited	Neuron (May 2017; 94: 517) <b>"Mosaic Analysis with Double Markers Reveals Distinct Sequential Functions of Lgl1 in Neural Stem Cells."</b> Author(s):Beattie R,Postiglione MP,Burnett LE,Laukotter S,Streicher C,Pauler FM,Xiao G,Klezovitch O,Vasioukhin V,Ghashghaei TH,Hippenmeyer S PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.neuron.2017.04.012">http://dx.doi.org/10.1016/j.neuron.2017.04.012</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	33-3900 was used in Immunohistochemistry-immunofluorescence to determine the role of specific serine proteases and sex determining region Y-box 2 in the initiation of endothelial-mesenchymal transitions.
Mouse / Not Cited	<p>Circulation research (Oct 2015; 117: 758)</p> <p><b>"Serine Protease Activation Essential for Endothelial-Mesenchymal Transition in Vascular Calcification."</b></p> <p>Author(s):Yao J,Guihard PJ,Blazquez-Medela AM,Guo Y,Moon JH,Jumabay M,Boström KI,Yao Y</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1161/CIRCRESAHA.115.306751">http://dx.doi.org/10.1161/CIRCRESAHA.115.306751</a></p>
	33-3900 was used in immunohistochemistry to examine granzyme B and perforin expression in bladder cancer cell lines and in urothelial carcinoma tissues
Not Applicable / Not Cited	<p>International journal of cancer (Sep 2010; 127: 1283)</p> <p><b>"Granzyme B is expressed in urothelial carcinoma and promotes cancer cell invasion."</b></p> <p>Author(s):D'Eliseo D,Pisu P,Romano C,Tubaro A,De Nunzio C,Morrone S,Santoni A,Stoppacciaro A,Velotti F</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1002/ijc.25135">http://dx.doi.org/10.1002/ijc.25135</a></p>
	33-3900 was used in immunohistochemistry to study the contribution of 4-3-3 to testis organization and spermatogenesis.
Human / 1:500	<p>Journal of cell science (May 2014; 127: 2174)</p> <p><b>"14-3-3-Mediated transport of plakoglobin to the cell border is required for the initiation of desmosome assembly in vitro and in vivo."</b></p> <p>Author(s):Sehgal L,Mukhopadhyay A,Rajan A,Khapare N,Sawant M,Vishal SS,Bhatt K,Ambatipudi S,Antao N,Alam H, Gurjar M,Basu S,Mathur R,Borde L,Hosing AS,Vaidya MM,Thorat R,Samaniego F,Kolthur-Seetharam U,Dalal SN</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1242/jcs.125807">http://dx.doi.org/10.1242/jcs.125807</a></p>
	33-3900 was used in immunohistochemistry - paraffin section to evaluate the role of VEGF-mediated angiogenesis in EMT-induced cancer stemness and tumorigenesis
Mouse / Not Cited	<p>Cancer research (Mar 2014; 74: 1566)</p> <p><b>"VEGF-mediated angiogenesis links EMT-induced cancer stemness to tumor initiation."</b></p> <p>Author(s):Fantozzi A,Gruber DC,Pisarsky L,Heck C,Kunita A,Yilmaz M,Meyer-Schaller N,Cornille K,Hopfer U,Bentires-Alj M,Christofori G</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1158/0008-5472.CAN-13-1641">http://dx.doi.org/10.1158/0008-5472.CAN-13-1641</a></p>
	33-3900 was used in immunohistochemistry to examine E-cadherin-negative ductal carcinoma.
Human / 1:150	<p>Histopathology (Apr 2013; 62: 695)</p> <p><b>"Further evidence that E-cadherin is not a tumour suppressor gene in invasive ductal carcinoma of the breast: an immunohistochemical study."</b></p> <p>Author(s):Rakha EA,Teoh TK,Lee AH,Nolan CC,Ellis IO,Green AR</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1111/his.12066">http://dx.doi.org/10.1111/his.12066</a></p>
	333900 was used in immunohistochemistry to describe a cardiovascular progenitor population derived during embryonic stem cell differentiation
Rat / Not Cited	<p>Stem cells international (Oct 2020; 2016: )</p> <p><b>"Isolation of an ES-Derived Cardiovascular Multipotent Cell Population Based on VE-Cadherin Promoter Activity."</b></p> <p>Author(s):Maltabe VA,Barka E,Kontonika M,Flourou D,Kouvara-Pritsouli M,Roumpi M,Agathopoulos S,Kolettis TM,Kouklis P</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1155/2016/8305624">http://dx.doi.org/10.1155/2016/8305624</a></p>
	33-3900 was used in immunohistochemistry to investigate genes regulated by Snail, Slug, and E47 transcription factors
Not Applicable / 1:25	<p>Cancer research (Oct 2006; 66: 9543)</p> <p><b>"Genetic profiling of epithelial cells expressing E-cadherin repressors reveals a distinct role for Snail, Slug, and E47 factors in epithelial-mesenchymal transition."</b></p> <p>Author(s):Moreno-Bueno G,Cubillo E,Sarrió D,Peinado H,Rodríguez-Pinilla SM,Villa S,Bolós V,Jordá M,Fabra A,Portillo F, Palacios J,Cano A</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1158/0008-5472.CAN-06-0479">http://dx.doi.org/10.1158/0008-5472.CAN-06-0479</a></p>
	33-3900 was used in immunohistochemistry to study the development of fatal cardiac hypertrophy and arrhythmia in mice overexpressing miRNA-17-92 in heart and smooth muscle
Mouse / Not Cited	<p>FASEB journal : official publication of the Federation of American Societies for Experimental Biology (Apr 2013; 27: 1460)</p> <p><b>"Cardiovascular dysregulation of miR-17-92 causes a lethal hypertrophic cardiomyopathy and arrhythmogenesis."</b></p> <p>Author(s):Danielson LS,Park DS,Rotllan N,Chamorro-Jorganes A,Guijarro MV,Fernandez-Hernando C,Fishman GI,Phoon CK,Hernando E</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1096/fj.12-221994">http://dx.doi.org/10.1096/fj.12-221994</a></p>
	33-3900 was used in immunohistochemistry to compare the eye defects of dyl and Foxe3 mutant mice
Not Applicable / Not Cited	<p>Developmental biology (Feb 2007; 302: 218)</p> <p><b>"Foxe3 is required for morphogenesis and differentiation of the anterior segment of the eye and is sensitive to Pax6 gene dosage."</b></p> <p>Author(s):Blixt A,Landgren H,Johansson BR,Carlsson P</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1016/j.ydbio.2006.09.021">http://dx.doi.org/10.1016/j.ydbio.2006.09.021</a></p>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

## 24 Immunocytochemistry References

Species / Dilution	Summary
	33-3900 was used in Immunocytochemistry to show that ESC transition to an early primed ESC (pESC) state reduces their pairing with TSCs and impairs synthetic embryogenesis.
Mouse / Not Cited	The Journal of cell biology (Apr 2021; 220: ) <b>"Pluripotency state regulates cytoneme selectivity and self-organization of embryonic stem cells."</b> Author(s):Junyent S,Reeves J,Gentleman E,Habib SJ PubMed Article URL: <a href="http://dx.doi.org/10.1083/jcb.202005095">http://dx.doi.org/10.1083/jcb.202005095</a>
Rat / 1:100	33-3900 was used in Immunofluorescence-cell culture cells to investigate the effect of PFOS on Sertoli cell blood-testis barrier, showing that injury occurs via Akt1/2 and disrupts F-actin and microtubule organization.  Scientific reports (Apr 2017; 7: ) <b>"Perfluorooctanesulfonate (PFOS)-induced Sertoli cell injury through a disruption of F-actin and microtubule organization is mediated by Akt1/2."</b> Author(s):Gao Y,Chen H,Xiao X,Lui WY,Lee WM,Mruk DD,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1038/s41598-017-01016-8">http://dx.doi.org/10.1038/s41598-017-01016-8</a>
Rat / 1:100	33-3900 was used in immunocytochemistry, immunohistochemistry - frozen section, and western blot report that crumbs homolog 3 is an actin microfilament regulator  Scientific reports (Jun 2016; 6: ) <b>"Polarity protein Crumbs homolog-3 (CRB3) regulates ectoplasmic specialization dynamics through its action on F-actin organization in Sertoli cells."</b> Author(s):Gao Y,Lui WY,Lee WM,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1038/srep28589">http://dx.doi.org/10.1038/srep28589</a>
Rat / 1:100	333900 was used in immunocytochemistry and western blot to examine the organization of actin microfilaments in Sertoli cell at the blood testis barrier  Spermatogenesis (Apr 2016; 6: ) <b>"Overexpression of plastin 3 in Sertoli cells disrupts actin microfilament bundle homeostasis and perturbs the tight junction barrier."</b> Author(s):Li N, Lee WM, Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1080/21565562.2016.1206353">http://dx.doi.org/10.1080/21565562.2016.1206353</a>
Rat / Not Cited	33-3900 was used in Immunocytochemistry-immunofluorescence to identify the interactions of dynamin II, cadherin- and occludin-based protein complexes, at the blood-testis barrier in adult rats.  The Journal of endocrinology (Dec 2006; 191: 571) <b>"Dynamin II interacts with the cadherin- and occludin-based protein complexes at the blood-testis barrier in adult rat testes."</b> Author(s):Lie PP,Xia W,Wang CQ,Mruk DD,Yan HH,Wong CH, Lee WM, Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1677/joe.1.06996">http://dx.doi.org/10.1677/joe.1.06996</a>
Mouse / Not Cited	The Journal of cell biology (Apr 2005; 169: 29) <b>"N-cadherin acts upstream of VE-cadherin in controlling vascular morphogenesis."</b> Author(s):Luo Y,Radice GL PubMed Article URL: <a href="http://dx.doi.org/10.1083/jcb.200411127">http://dx.doi.org/10.1083/jcb.200411127</a>
Human / 1:500	33-3900 was used in Immunocytochemistry-immunofluorescence to show that antagonizing STK25 signaling hinders the development of NASH-related HCC and provides an impetus for further analysis of STK25 as a therapeutic target for NASH-induced HCC treatment in human beings.  Cellular and molecular gastroenterology and hepatology (Apr 2022; 13: 405) <b>"Antagonizing STK25 Signaling Suppresses the Development of Hepatocellular Carcinoma Through Targeting Metabolic, Inflammatory, and Pro-Oncogenic Pathways."</b> Author(s):Kurhe Y,Caputo M,Cansby E,Xia Y,Kumari S,Anand SK,Howell BW,Marschall HU,Mahlapuu M PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.jcmgh.2021.09.018">http://dx.doi.org/10.1016/j.jcmgh.2021.09.018</a>
Mouse / 1:250	33-3900 was used in Immunocytochemistry-immunofluorescence to define the architecture, dynamics and proteome of the cardiomyocyte adherens junctions.  Journal of cell science (Feb 2019; 132: ) <b>"The N-cadherin interactome in primary cardiomyocytes as defined using quantitative proximity proteomics."</b> Author(s):Li Y,Merkel CD,Zeng X,Heier JA,Cantrell PS,Sun M,Stolz DB,Watkins SC,Yates NA,Kwiatkowski AV PubMed Article URL: <a href="http://dx.doi.org/10.1242/jcs.221606">http://dx.doi.org/10.1242/jcs.221606</a>
Rat / 1:50	33-3900 was used in immunocytochemistry and western blot to study protein trafficking in Sertoli cells  Experimental cell research (Oct 2010; 316: 2945) <b>"Differential effects of testosterone and TGF-3 on endocytic vesicle-mediated protein trafficking events at the blood-testis barrier."</b> Author(s):Su L,Mruk DD, Lee WM, Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.yexcr.2010.07.018">http://dx.doi.org/10.1016/j.yexcr.2010.07.018</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.



	33-3900 was used in immunocytochemistry and western blot to examine cadherin expression in mouse fibroblast-like synoviocytes
Not Applicable / Not Cited	Arthritis and rheumatism (Apr 2008; 58: 1044) <b>"Coexpression of two mesenchymal cadherins, cadherin 11 and N-cadherin, on murine fibroblast-like synoviocytes."</b> Author(s):Agarwal SK, Lee DM, Kiener HP, Brenner MB PubMed Article URL: <a href="http://dx.doi.org/10.1002/art.23369">http://dx.doi.org/10.1002/art.23369</a>
	33-3900 was used in immunocytochemistry to describe a method to cultivate corneal endothelial cells for transplantation.
Human / 1:100	Tissue engineering. Part A (Sep 2011; 17: 2213) <b>"A novel gelatin hydrogel carrier sheet for corneal endothelial transplantation."</b> Author(s):Watanabe R, Hayashi R, Kimura Y, Tanaka Y, Kageyama T, Hara S, Tabata Y, Nishida K PubMed Article URL: <a href="http://dx.doi.org/10.1089/ten.TEA.2010.0568">http://dx.doi.org/10.1089/ten.TEA.2010.0568</a>
	33-3900 was used in Immunocytochemistry to suggest that pannexin1 overexpression in breast cancer is associated with a shift towards an epithelial-to-mesenchymal transition phenotype that initiates a tumour-promoting effect.
Human / Not Cited	Cancers (Dec 2019; 11: ) <b>"Pannexin1 Is Associated with Enhanced Epithelial-To-Mesenchymal Transition in Human Patient Breast Cancer Tissues and in Breast Cancer Cell Lines."</b> Author(s):Jalaliddine N, El-Hajjar L, Dakik H, Shaito A, Saliba J, Safi R, Zibara K, El-Sabban M PubMed Article URL: <a href="http://dx.doi.org/10.3390/cancers11121967">http://dx.doi.org/10.3390/cancers11121967</a>
	333900 was used in immunocytochemistry to show that decreased WNT/beta-catenin contributes to the pathophysiology of lamin A/C gene cardiomyopathy
Mouse / Not Cited	Human molecular genetics (Jan 2017; 26: 333) <b>"Decreased WNT/catenin signalling contributes to the pathogenesis of dilated cardiomyopathy caused by mutations in the lamin a/C gene."</b> Author(s):Le Dour C, Macquart C, Sera F, Homma S, Bonne G, Morrow JP, Worman HJ, Muchir A PubMed Article URL: <a href="http://dx.doi.org/10.1093/hmg/ddw389">http://dx.doi.org/10.1093/hmg/ddw389</a>
Tag / Not Cited	The Journal of biological chemistry (May 2005; 280: 19925) <b>"Connexin43 associated with an N-cadherin-containing multiprotein complex is required for gap junction formation in NIH3T3 cells."</b>
Mouse / Not Cited	Author(s):Wei CJ, Francis R, Xu X, Lo CW PubMed Article URL: <a href="http://dx.doi.org/10.1074/jbc.M412921200">http://dx.doi.org/10.1074/jbc.M412921200</a>
	33-3900 was used in Immunocytochemistry-immunofluorescence to show Visco-NPS identifies viscoelastic characteristics of cell populations, providing a biophysical understanding of cellular behavior and a potential for clinical applications.
Human / 1:100	iScience (Mar 2019; 13: 214) <b>"Visco-Node-Pore Sensing: A Microfluidic Rheology Platform to Characterize Viscoelastic Properties of Epithelial Cells."</b> Author(s):Kim J, Li B, Scheideler OJ, Kim Y, Sohn LL PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.isci.2019.02.021">http://dx.doi.org/10.1016/j.isci.2019.02.021</a>
	33-3900 was used in Immunofluorescence to show that HNF4 increases the expression of OCT1 and CNT3 in RCCNG1 cells, thereby increasing the chemosensitivity of tumor cells to oxaliplatin and 5-FU.
Human / Not Cited	Journal of pharmaceutical sciences (Oct 2014; 103: 3326) <b>"HNF4 induced chemosensitivity to oxaliplatin and 5-FU mediated by OCT1 and CNT3 in renal cell carcinoma."</b> Author(s):Hagos Y, Wegner W, Kuehne A, Floerl S, Marada VV, Burckhardt G, Henjakovic M PubMed Article URL: <a href="http://dx.doi.org/10.1002/jps.24128">http://dx.doi.org/10.1002/jps.24128</a>
	FASEB journal : official publication of the Federation of American Societies for Experimental Biology (Feb 2012; 26: 503) <b>"Cadherin-11 contributes to pulmonary fibrosis: potential role in TGF- production and epithelial to mesenchymal transition."</b>
Mouse / Not Cited	Author(s):Schneider DJ, Wu M, Le TT, Cho SH, Brenner MB, Blackburn MR, Agarwal SK PubMed Article URL: <a href="http://dx.doi.org/10.1096/fj.11-186098">http://dx.doi.org/10.1096/fj.11-186098</a>
	Journal of cell science (Nov 2014; 127: 4870) <b>"rpS6 regulates blood-testis barrier dynamics through Akt-mediated effects on MMP-9."</b>
Rat / 1:100	Author(s):Mok KW, Mruk DD, Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1242/jcs.152231">http://dx.doi.org/10.1242/jcs.152231</a>
	33-3900 was used in immunocytochemistry to identify the membrane ruffle-targeting region of beta-catenin
	The Journal of biological chemistry (Mar 2007; 282: 8545) <b>"IQ-domain GTPase-activating protein 1 regulates beta-catenin at membrane ruffles and its role in macropinocytosis of N-cadherin and adenomatous polyposis coli."</b>
Not Applicable / 1:100	Author(s):Sharma M, Henderson BR PubMed Article URL: <a href="http://dx.doi.org/10.1074/jbc.M610272200">http://dx.doi.org/10.1074/jbc.M610272200</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

Mouse / 1:100	Journal of cell science (Apr 2003; 116: 1471) <b>"Cadherin-mediated adhesion is essential for myofibril continuity across the plasma membrane but not for assembly of the contractile apparatus."</b> Author(s):Luo Y,Radice GL PubMed Article URL: <a href="http://dx.doi.org/10.1242/jcs.00339">http://dx.doi.org/10.1242/jcs.00339</a>
	33-3900 was used in immunocytochemistry, immunoprecipitation, and western blot to determine regulation of ectoplasmic specialization dynamics via its effects on actin microfilaments in the testes of male rats by planar cell polarity (PCP) protein Vangl2
Not Applicable / 1:100	Endocrinology (May 2016; 157: 2140) <b>"Planar Cell Polarity (PCP) Protein Vangl2 Regulates Ectoplasmic Specialization Dynamics via Its Effects on Actin Microfilaments in the Testes of Male Rats."</b> Author(s):Chen H,Mruk DD, Lee WM,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1210/en.2015-1987">http://dx.doi.org/10.1210/en.2015-1987</a>
	33-3900 was used in Immunocytochemistry to investigate the connection between metabolic switch and epithelial-mesenchymal transition in promoting cellular reprogramming.
Mouse / 1:200	The EMBO journal (Apr 2020; 39: ) <b>"Metabolic switch and epithelial-mesenchymal transition cooperate to regulate pluripotency."</b> Author(s):Sun H,Yang X,Liang L,Zhang M,Li Y,Chen J,Wang F,Yang T,Meng F,Lai X,Li C,He J,He M,Xu Q,Li Q,Lin L,Pei D,Zheng H PubMed Article URL: <a href="http://dx.doi.org/10.15252/emboj.2019102961">http://dx.doi.org/10.15252/emboj.2019102961</a>
	33-3900 was used in Immunocytochemistry to study the expression of N-cadherin in neuroblastoma tumours and cell lines.
Human / Not Cited	PloS one (Jun 2012; 7: ) <b>"N-cadherin in neuroblastoma disease: expression and clinical significance."</b> Author(s):Lammens T,Swerts K,Derycke L,De Craemer A,De Brouwer S,De Preter K, Van Roy N,Vandesompele J, Speleman F,Philippe J,Benoit Y,Beiske K,Bracke M,Laureys G PubMed Article URL: <a href="http://dx.doi.org/10.1371/journal.pone.0031206">http://dx.doi.org/10.1371/journal.pone.0031206</a>
	33-3900 was used in immunocytochemistry to characterize disruption of the sertolic cell cytoskeleton by interleukin 1alpha and its affect on gap junctional communication
Not Applicable / 1:100	Cellular signalling (May 2016; 28: 469) <b>"Interleukin 1alpha-induced disruption of the Sertoli cell cytoskeleton affects gap junctional communication."</b> Author(s):Chojnacka K,Bilinska B,Mruk DD PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.cellsig.2016.02.003">http://dx.doi.org/10.1016/j.cellsig.2016.02.003</a>
<b>26 Immunohistochemistry (Paraffin) References</b>	
<b>Species / Dilution</b>	<b>Summary</b>
	33-3900 was used in Immunohistochemistry-immunofluorescence to study the signalling responsible for inducing Sertoli cell tight junction disassembly, which allows for germ cell movement.
Rat / Not Cited	Endocrine reviews (Oct 2004; 25: 747) <b>"Sertoli-Sertoli and Sertoli-germ cell interactions and their significance in germ cell movement in the seminiferous epithelium during spermatogenesis."</b> Author(s):Mruk DD,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1210/er.2003-0022">http://dx.doi.org/10.1210/er.2003-0022</a>
	33-3900 was used in immunohistochemistry - paraffin section and western blot to investigate the effect of miR-200c on claudin-low breast cancer.
Mouse / Not Cited	Oncogene (Dec 2015; 34: 5997) <b>"Expression of miR-200c in claudin-low breast cancer alters stem cell functionality, enhances chemosensitivity and reduces metastatic potential."</b> Author(s):Knezevic J,Pfefferle AD,Petrovic I, Greene SB,Perou CM,Rosen JM PubMed Article URL: <a href="http://dx.doi.org/10.1038/onc.2015.48">http://dx.doi.org/10.1038/onc.2015.48</a>
	33-3900 was used in immunohistochemistry - paraffin section to investigate the expression of E-, N-, and P-cadherin in ductal carcinoma in situ of the breast
Not Applicable / 1:400	Virchows Archiv : an international journal of pathology (Jan 2002; 440: 16) <b>"P-cadherin expression is associated with high-grade ductal carcinoma in situ of the breast."</b> Author(s):Paredes J,Milanezi F,Viegas L,Amendoeira I,Schmitt F PubMed Article URL: <a href="http://dx.doi.org/10.1007/s004280100487">http://dx.doi.org/10.1007/s004280100487</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	33-3900 was used in Immunohistochemistry (Paraffin), Western Blot to demonstrate that FAM83H-AS1 upregulates ULK3 expression through the transcription factor c-Myc and promotes the progression of BCa.
Human / Not Cited	Cell cycle (Georgetown, Tex.) (Dec 2020; 19: 3546) <b>"Promoting roles of long non-coding RNA FAM83H-AS1 in bladder cancer growth, metastasis, and angiogenesis through the c-Myc-mediated ULK3 upregulation."</b> Author(s):Liu B,Gao W,Sun W,Li L,Wang C,Yang X,Liu J,Guo Y PubMed Article URL: <a href="http://dx.doi.org/10.1080/15384101.2020.1850971">http://dx.doi.org/10.1080/15384101.2020.1850971</a>
	33-3900 was used in immunohistochemistry - paraffin section to compare clinicopathological characteristics and immunohistochemical profiles of simultaneous bilateral breast cancer and corresponding lymph node metastases
Not Applicable / Not Cited	Histology and histopathology (Jul 2005; 20: 791) <b>"Simultaneous bilateral breast carcinoma: Histopathological characteristics and CD44/catenin-cadherin profile."</b> Author(s):Bassarova AV,Torlakovic E,Sedloev T,Hristova SL,Trifonov DV,Nesland JM PubMed Article URL: <a href="http://dx.doi.org/10.14670/HH-20.791">http://dx.doi.org/10.14670/HH-20.791</a>
	33-3900 was used in immunohistochemistry - paraffin section to investigate zyxin, axin, and Wiskott-Aldrich syndrome protein in the seminiferous epithelium
Not Applicable / 1:100	Journal of andrology (Sep 2004; 25: 200) <b>"Zyxin, axin, and Wiskott-Aldrich syndrome protein are adaptors that link the cadherin/catenin protein complex to the cytoskeleton at adherens junctions in the seminiferous epithelium of the rat testis."</b> Author(s):Lee NP,Mruk DD,Conway AM,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1002/j.1939-4640.2004.tb02780.x">http://dx.doi.org/10.1002/j.1939-4640.2004.tb02780.x</a>
	33-3900 was used in Immunohistochemistry (Paraffin) to propose that embryonic perturbation of Wnt signalling in cardiomyocytes leads to right ventricular arrhythmic susceptibility in the adult heart through chamber-specific regulation of genes regulating cellular electrophysiology.
Mouse / 1:100	Journal of molecular and cellular cardiology (Oct 2018; 123: 92) <b>"Differential Wnt-mediated programming and arrhythmogenesis in right versus left ventricles."</b> Author(s):Li G,Khandekar A,Yin T,Hicks SC,Guo Q,Takahashi K,Lipovsky CE,Brumback BD,Rao PK,Weinheimer CJ,Rentschler SL PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.yjmcc.2018.09.002">http://dx.doi.org/10.1016/j.yjmcc.2018.09.002</a>
	33-3900 was used in immunohistochemistry - paraffin section to measure the expression of tenascin-C, osteopontin, and fibronectin in inflammatory myofibroblastic tumor of the lung
Not Applicable / 1:200	APMIS : acta pathologica, microbiologica, et immunologica Scandinavica (Feb 2010; 118: 91) <b>"Variable expression of tenascin-C, osteopontin and fibronectin in inflammatory myofibroblastic tumour of the lung."</b> Author(s):Kaarteenaho R,Sormunen R,Pääkkö P PubMed Article URL: <a href="http://dx.doi.org/10.1111/j.1600-0463.2009.02566.x">http://dx.doi.org/10.1111/j.1600-0463.2009.02566.x</a>
	333900 was used in immunohistochemistry - paraffin section to study markers of the epithelial to mesenchymal transition using invasive lobular carcinoma samples
Human / 1:150	The Journal of pathology (Mar 2016; 238: 489) <b>"An epithelial to mesenchymal transition programme does not usually drive the phenotype of invasive lobular carcinomas."</b> Author(s):McCart Reed AE,Kutasovic JR,Vargas AC,Jayanthan J,AI-Murrani A,Reid LE,Chambers R,Da Silva L,Melville L,Evans E,Porter A,Papadimos D,Thompson EW,Lakhani SR,Simpson PT PubMed Article URL: <a href="http://dx.doi.org/10.1002/path.4668">http://dx.doi.org/10.1002/path.4668</a>
	33-3900 was used in immunohistochemistry - paraffin section to present three cases of primary peritoneal malignant mixed mullerian tumors
Not Applicable / Not Cited	International journal of gynecological cancer : official journal of the International Gynecological Cancer Society (Mar 2004; 13: 870) <b>"Oncoprotein profiles of primary peritoneal malignant mixed müllerian tumors."</b> Author(s):Ng JS,Han AC,Edelson MI,Rosenblum NG PubMed Article URL: <a href="http://dx.doi.org/10.1111/j.1525-1438.2003.13332.x">http://dx.doi.org/10.1111/j.1525-1438.2003.13332.x</a>
	33-3900 was used in immunohistochemistry - paraffin section to discover if N-cadherin expression is associated with the bladder tumor progression
Not Applicable / 1:200	Clinical cancer research : an official journal of the American Association for Cancer Research (May 2006; 12: 2780) <b>"N-cadherin as a novel prognostic marker of progression in superficial urothelial tumors."</b> Author(s):Lascombe I,Clairotte A,Fauconnet S,Bernardini S,Wallerand H,Kantelip B,Bittard H PubMed Article URL: <a href="http://dx.doi.org/10.1158/1078-0432.CCR-05-2387">http://dx.doi.org/10.1158/1078-0432.CCR-05-2387</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	33-3900 was used in Immunohistochemistry (Paraffin) to find that RSPO2/Rspo2 expression is restricted to the oocyte of developing follicles in both human and mouse ovaries from the beginning of the follicular growth.
Human / 1:200	Cell death and differentiation (Oct 2020; 27: 2856) <b>"R-spondin2 signaling is required for oocyte-driven intercellular communication and follicular growth."</b> Author(s):De Cian MC,Gregoire EP,Le Rolle M,Lachambre S,Mondin M,Bell S,Guigon CJ,Chassot AA,Chaboissier MC PubMed Article URL: <a href="http://dx.doi.org/10.1038/s41418-020-0547-7">http://dx.doi.org/10.1038/s41418-020-0547-7</a>
	33-3900 was used in immunohistochemistry - paraffin section and western blot to characterize the equine blood-testis barrier during tubular development in normal and cryptorchid stallions
Horse / 1:500	Theriogenology (Sep 2015; 84: 763) <b>"Characterization of the equine blood-testis barrier during tubular development in normal and cryptorchid stallions."</b> Author(s):Rode K,Sieme H,Richterich P,Brehm R PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.theriogenology.2015.05.009">http://dx.doi.org/10.1016/j.theriogenology.2015.05.009</a>
	33-3900 was used in immunohistochemistry - paraffin section to characterize a conditional knock out of ataxia telangiectasia-mutated as a mouse model of pancreatic ductal adenocarcinoma
Not Applicable / 1:100	Nature communications (Jul 2015; 6: ) <b>"Loss of ATM accelerates pancreatic cancer formation and epithelial-mesenchymal transition."</b> Author(s):Russell R,Perkhofer L,Liebau S,Lin Q,Lechel A,Feld FM,Hessmann E,Gaedcke J,Güthle M,Zenke M,Hartmann D,von Figura G,Weissinger SE,Rudolph KL,Möller P,Lennerz JK,Seufferlein T,Wagner M,Kleger A PubMed Article URL: <a href="http://dx.doi.org/10.1038/ncomms8677">http://dx.doi.org/10.1038/ncomms8677</a>
	33-3900 was used in immunohistochemistry - paraffin section and western blot to assess if E- and N-cadherin expression has diagnostic value for intrahepatic cholangiocarcinoma
Not Applicable / 1:50	Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc (Feb 2009; 22: 182) <b>"N-cadherin serves as diagnostic biomarker in intrahepatic and perihilar cholangiocarcinomas."</b> Author(s):Mosnier JF,Kandel C,Cazals-Hatem D,Bou-Hanna C,Gournay J,Jarry A,Laboisse CL PubMed Article URL: <a href="http://dx.doi.org/10.1038/modpathol.2008.123">http://dx.doi.org/10.1038/modpathol.2008.123</a>
	33-3900 was used in Immunohistochemistry (Paraffin) to reveal the preventative effect of TGF-1 in hypospadias induced by DEHP via the reduction of EMT.
Rat / 1:100	Pediatric research (Mar 2020; 87: 639) <b>"TGF-1 relieves epithelial-mesenchymal transition reduction in hypospadias induced by DEHP in rats."</b> Author(s):Zhou Y,Huang F,Liu Y,Li D,Zhou Y,Shen L,Long C,Liu X,Wei G PubMed Article URL: <a href="http://dx.doi.org/10.1038/s41390-019-0622-2">http://dx.doi.org/10.1038/s41390-019-0622-2</a>
	33-3900 was used in immunohistochemistry - paraffin section to measure the E- and N-cadherin and beta- and alpha-catenin expression in benign and malignant epithelial neoplasms of the ovary and correlate expression with tumor staging, histological grade,
Not Applicable / 1:200	Gynecologic oncology (Jul 2004; 94: 16) <b>"Immunohistochemical patterns for alpha- and beta-catenin, E- and N-cadherin expression in ovarian epithelial tumors."</b> Author(s):Marques FR,Fonsechi-Carvasan GA,De Angelo Andrade LA,Böttcher-Luiz F PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.ygyno.2004.03.037">http://dx.doi.org/10.1016/j.ygyno.2004.03.037</a>
	33-3900 was used in Immunohistochemistry (Paraffin) to demonstrate that combining overexpression of p-rpS6-MT with a male contraceptive (e.g., adjuvin) potentiate the drug bioavailability by modifying the blood-testis barrier.
Rat / 1:100	American journal of physiology. Endocrinology and metabolism (Jul 2019; 317: E121) <b>"mTORC1/rpS6 signaling complex modifies BTB transport function: an in vivo study using the adjuvin model."</b> Author(s):Yan M,Li L,Mao B,Li H,Li SYT,Mruk D,Silvestrini B,Lian Q,Ge R,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1152/ajpendo.00553.2018">http://dx.doi.org/10.1152/ajpendo.00553.2018</a>
	33-3900 was used in immunohistochemistry - paraffin section to use adipose tissue-derived stem cells to generate dental buds.
Human / 1:40	The American journal of pathology (May 2011; 178: 2299) <b>"Adipose tissue-derived stem cell in vitro differentiation in a three-dimensional dental bud structure."</b> Author(s):Ferro F,Spelat R,Falini G,Gallelli A,D'Aurizio F,Puppato E,Pandolfi M,Beltrami AP,Cesselli D,Beltrami CA,Ambesi-Impiombato FS,Curcio F PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.ajpath.2011.01.055">http://dx.doi.org/10.1016/j.ajpath.2011.01.055</a>
	33-3900 was used in immunohistochemistry - paraffin section to determine mediation of differentiation and cisplatin chemotherapy resistance by biased expression of the FOXP3delta3 isoform in aggressive bladder cancer
Not Applicable / 1:50	Clinical cancer research : an official journal of the American Association for Cancer Research (Nov 2016; 22: 5349) <b>"Biased Expression of the FOXP33 Isoform in Aggressive Bladder Cancer Mediates Differentiation and Cisplatin Chemotherapy Resistance."</b> Author(s):Zhang H,Prado K,Zhang KX,Peek EM,Lee J,Wang X,Huang J,Li G,Pellegrini M,Chin AI PubMed Article URL: <a href="http://dx.doi.org/10.1158/1078-0432.CCR-15-2581">http://dx.doi.org/10.1158/1078-0432.CCR-15-2581</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.



	33-3900 was used in Immunohistochemistry on paraffin embedded tissues to show cadherin switch promotes cancer progression via TGF--induced EMT in extrahepatic CC, suggesting a target for elucidating the mechanisms of invasion and metastasis in extrahepatic CC.
Human / 1:50	British journal of cancer (Dec 2011; 105: 1885) <b>"E/N-cadherin switch mediates cancer progression via TGF--induced epithelial-to-mesenchymal transition in extrahepatic cholangiocarcinoma."</b> Author(s):Araki K,Shimura T,Suzuki H,Tsutsumi S,Wada W,Yajima T,Kobayahi T,Kubo N,Kuwano H PubMed Article URL: <a href="http://dx.doi.org/10.1038/bjc.2011.452">http://dx.doi.org/10.1038/bjc.2011.452</a>
	33-3900 was used in immunohistochemistry - paraffin section to investigate the effect of N-cadherin misexpression in mice
Not Applicable / Not Cited	Journal of cellular biochemistry (Aug 2005; 95: 1093) <b>"Effect of N-cadherin misexpression by the mammary epithelium in mice."</b> Author(s):Knudsen KA,Sauer C,Johnson KR,Wheelock MJ PubMed Article URL: <a href="http://dx.doi.org/10.1002/jcb.20469">http://dx.doi.org/10.1002/jcb.20469</a>
	33-3900 was used in immunohistochemistry - paraffin section to study lens development in Pax6(Sey)(-Neu)/+ mouse embryos.
Mouse / 1:500	Development (Cambridge, England) (Dec 2000; 127: 5439) <b>"Dosage requirement and allelic expression of PAX6 during lens placode formation."</b> Author(s):van Raamsdonk CD,Tilghman SM PubMed Article URL: <a href="http://dx.doi.org/10.1242/dev.127.24.5439">http://dx.doi.org/10.1242/dev.127.24.5439</a>
	33-3900 was used in Immunohistochemistry (Paraffin) to provide new information on the localization and expression of cell-cell junction proteins in the testis, epididymis, and ductus deferens of domestic turkeys, and compare expression of junctional protein genes between 2 turkey population, one that produces white normal semen (WNS) and the other that produces yellow abnormal semen.
Avian / 1:50	Poultry science (Jan 2020; 99: 555) <b>"Differential expression of cell-cell junction proteins in the testis, epididymis, and ductus deferens of domestic turkeys (Meleagris gallopavo) with white and yellow semen."</b> Author(s):Pardyak L,Kaminska A,Brzoskwinia M,Hejmej A,Kotula-Balak M,Jankowski J,Ciereszko A,Bilinska B PubMed Article URL: <a href="http://dx.doi.org/10.3382/ps/pez494">http://dx.doi.org/10.3382/ps/pez494</a>
	33-3900 was used in immunohistochemistry - paraffin section to measure Twist and E- and N-cadherin expression in human primary bladder tumor from tobacco and non-tobacco users and evaluate their prognostic value
Not Applicable / 1:200	Urologic oncology (Jul 2009; 27: 268) <b>"The expression of Twist has an impact on survival in human bladder cancer and is influenced by the smoking status."</b> Author(s):Fondreville ME,Kantelip B,Reiter RE,Chopin DK,Thiery JP,Monnien F,Bittard H,Wallerand H PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.urolonc.2007.12.012">http://dx.doi.org/10.1016/j.urolonc.2007.12.012</a>
	33-3900 was used in immunohistochemistry - paraffin section to investigate the relationship between primary mucoepidermoid carcinoma of the thyroid and papillary thyroid carcinoma
Not Applicable / 1:400	Virchows Archiv : an international journal of pathology (May 2002; 440: 498) <b>"Mucoepidermoid carcinoma of the thyroid: a tumour histotype characterised by P-cadherin neoexpression and marked abnormalities of E-cadherin/catenins complex."</b> Author(s):Rocha AS,Soares P,Machado JC,Máximo V,Fonseca E,Franssila K,Sobrinho-Simões M PubMed Article URL: <a href="http://dx.doi.org/10.1007/s00428-002-0622-0">http://dx.doi.org/10.1007/s00428-002-0622-0</a>
<b>8 Immunohistochemistry (Frozen) References</b>	
Species / Dilution	Summary
	33-3900 was used in immunohistochemistry - frozen section to elucidate the critical role of TRPV2 in maintenance of cardiac function and structure in mice
Human / 1:100	Nature communications (May 2014; 5: ) <b>"TRPV2 is critical for the maintenance of cardiac structure and function in mice."</b> Author(s):Katanosaka Y,Iwasaki K,Ujihara Y,Takatsu S,Nishitsuji K,Kanagawa M,Sudo A,Toda T,Katanosaka K,Mohri S,Naruse K PubMed Article URL: <a href="http://dx.doi.org/10.1038/ncomms4932">http://dx.doi.org/10.1038/ncomms4932</a>
	33-3900 was used in immunohistochemistry - frozen section to study the initiation and regulation of radial migration.
Mouse / 1:200	Nature communications (Sep 2014; 5: ) <b>"Cdk5-mediated phosphorylation of RapGEF2 controls neuronal migration in the developing cerebral cortex."</b> Author(s):Ye T,Ip JP,Fu AK,Ip NY PubMed Article URL: <a href="http://dx.doi.org/10.1038/ncomms5826">http://dx.doi.org/10.1038/ncomms5826</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	33-3900 was used in immunohistochemistry - frozen section to test if TGF-beta3 regulates anchoring junction dynamics in the blood-testis barrier
Not Applicable / 1:100	Developmental biology (Apr 2005; 280: 321) <b>"TGF-beta3 regulates anchoring junction dynamics in the seminiferous epithelium of the rat testis via the Ras/ERK signaling pathway: An in vivo study."</b> Author(s):Xia W,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.ydbio.2004.12.036">http://dx.doi.org/10.1016/j.ydbio.2004.12.036</a>
	33-3900 was used in immunohistochemistry - frozen section to show that the cadherin/catenin complex is present between Sertoli and germ cells and is used for the assembly of functional adherens junctions.
Rat / Not Cited	Biology of reproduction (Feb 2003; 68: 489) <b>"Is the cadherin/catenin complex a functional unit of cell-cell actin-based adherens junctions in the rat testis?"</b> Author(s):Lee NP,Mruk D, Lee WM,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1095/biolreprod.102.005793">http://dx.doi.org/10.1095/biolreprod.102.005793</a>
	33-3900 was used in immunohistochemistry - frozen section to study induction of granulosa cell fate and defects and cancers in mouse adult ovary by amplification of R-spondin1 signaling
Not Applicable / 1:200	Oncogene (Jan 2017; 36: 208) <b>"Amplification of R-spondin1 signaling induces granulosa cell fate defects and cancers in mouse adult ovary."</b> Author(s):De Cian MC,Pauper E,Bandiera R,Vidal VP,Sacco S,Gregoire EP,Chassot AA,Panzolini C,Wilhelm D,Pailhoux E,Youssef SA,de Bruin A,Teerds K,Schedl A,Gillot I,Chaboissier MC PubMed Article URL: <a href="http://dx.doi.org/10.1038/onc.2016.191">http://dx.doi.org/10.1038/onc.2016.191</a>
	33-3900 was used in immunohistochemistry - frozen section to study regulation of the blood-testis barrier
Not Applicable / 1:100	Journal of cellular physiology (Oct 2005; 205: 141) <b>"Disruption of Sertoli-germ cell adhesion function in the seminiferous epithelium of the rat testis can be limited to adherens junctions without affecting the blood-testis barrier integrity: an in vivo study using an androgen suppression model."</b> Author(s):Xia W,Wong CH, Lee NP, Lee WM,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1002/jcp.20377">http://dx.doi.org/10.1002/jcp.20377</a>
	33-3900 was used in Immunohistochemistry (Frozen) to suggest that Cx43 reduction in symptomatic DMD carrier mice leads to prevention of Cx43 remodeling in the heart and prevention of aberrant Cx43 hemichannel activity in the skeletal muscle macrophages neighboring Cx43 non-expressing fibers.
Mouse / 1:300	Scientific reports (Mar 2020; 10: ) <b>"Connexin-43 reduction prevents muscle defects in a mouse model of manifesting Duchenne muscular dystrophy female carriers."</b> Author(s):Nouet J,Himelman E,Lahey KC,Zhao Q,Fraidenraich D PubMed Article URL: <a href="http://dx.doi.org/10.1038/s41598-020-62844-9">http://dx.doi.org/10.1038/s41598-020-62844-9</a>
	33-3900 was used in immunohistochemistry - frozen section to determine the distribution pattern and physiological function of coxsackie and adenovirus receptor in the testis
Not Applicable / 1:50	Experimental cell research (Apr 2007; 313: 1373) <b>"Coxsackie and adenovirus receptor (CAR) is a product of Sertoli and germ cells in rat testes which is localized at the Sertoli-Sertoli and Sertoli-germ cell interface."</b> Author(s):Wang CQ,Mruk DD, Lee WM,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.yexcr.2007.01.017">http://dx.doi.org/10.1016/j.yexcr.2007.01.017</a>

2 Flow Cytometry References	
Species / Dilution	Summary
	33-3900 was used in Flow cytometry/Cell sorting to study the role of Polybromo-1 in prostate cancer.
Human / 1:100	International journal of molecular sciences (Jun 2019; 20: ) <b>"New Insights into the Role of Polybromo-1 in Prostate Cancer."</b> Author(s):Mota STS,Vecchi L,Zóia MAP,Oliveira FM,Alves DA,Dornelas BC,Bezerra SM,Andrade VP,Maia YCP,Neves AF,Goulart LR,Araújo TG PubMed Article URL: <a href="http://dx.doi.org/10.3390/ijms20122852">http://dx.doi.org/10.3390/ijms20122852</a>
	33-3900 was used in Western Blotting to show that endothelial-mesenchymal transitions emerged in endothelial cells of cerebral arteriovenous malformation and caused disruption of the lumen.
Human / Not Cited	The Journal of clinical investigation (Jun 2019; 129: 3121) <b>"Elevated endothelial Sox2 causes lumen disruption and cerebral arteriovenous malformations."</b> Author(s):Yao J,Wu X,Zhang D,Wang L,Zhang L,Reynolds EX,Hernandez C,Boström KI,Yao Y PubMed Article URL: <a href="http://dx.doi.org/10.1172/JCI125965">http://dx.doi.org/10.1172/JCI125965</a>

18 Miscellaneous PubMed References	
Species / Dilution	Summary

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	33-3900 was used in immunohistochemistry (paraffin) to examine epithelial-type cadherin and neural-type cadherin as diagnostic markers of malignant noncarcinomatous neoplasms.
Human / 1:200	Archives of pathology & laboratory medicine (Apr 2002; 126: 425) <b>"Epithelial-type and neural-type cadherin expression in malignant noncarcinomatous neoplasms with epithelioid features that involve the soft tissues."</b> Author(s):Laskin WB,Miettinen M PubMed Article URL: <a href="http://dx.doi.org/10.5858/2002-126-0425-ETANTC">http://dx.doi.org/10.5858/2002-126-0425-ETANTC</a>
	33-3900 was used in immunohistochemistry - paraffin section and western blot to explore the effect of cadherin specificity on cardiac structure and function.
Mouse / 1:1000	Journal of cell science (Apr 2002; 115: 1623) <b>"Remodeling the intercalated disc leads to cardiomyopathy in mice misexpressing cadherins in the heart."</b> Author(s):Ferreira-Cornwell MC,Luo Y,Narula N,Lenox JM,Lieberman M,Radice GL PubMed Article URL: <a href="http://dx.doi.org/10.1242/jcs.115.8.1623">http://dx.doi.org/10.1242/jcs.115.8.1623</a>
	33-3900 was used in immunohistochemistry (paraffin) to describe the molecular pathologic characteristics of urothelial carcinomas subtypes.
Human / 1:100	The American journal of pathology (Sep 2013; 183: 681) <b>"Toward a molecular pathologic classification of urothelial carcinoma."</b> Author(s):Sjödahl G,Lövgren K,Lauss M,Patschan O,Gudjonsson S,Chebil G,Aine M,Eriksson P,Månsson W,Lindgren D,Fernö M,Liedberg F,Höglund M PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.ajpath.2013.05.013">http://dx.doi.org/10.1016/j.ajpath.2013.05.013</a>
	33-3900 was used in immunoprecipitation to study the contribution of ZO-1 to cell-cell junction localization
Rat / Not Cited	American journal of physiology. Heart and circulatory physiology (Feb 2011; 300: H583) <b>"ZO-1 determines adherens and gap junction localization at intercalated disks."</b> Author(s):Palatinus JA,O'Quinn MP,Barker RJ,Harris BS,Jourdan J,Gourdie RG PubMed Article URL: <a href="http://dx.doi.org/10.1152/ajpheart.00999.2010">http://dx.doi.org/10.1152/ajpheart.00999.2010</a>
	33-3900 was used in immunohistochemistry to describe the clinicopathological features of papillary thyroid carcinoma.
Human / 1:400	The Journal of pathology (Jul 2001; 194: 358) <b>"Abnormalities of the E-cadherin/catenin adhesion complex in classical papillary thyroid carcinoma and in its diffuse sclerosing variant."</b> Author(s):Rocha AS,Soares P,Seruca R,Máximo V,Matias-Guiu X,Cameselle-Teijeiro J,Sobrinho-Simões M PubMed Article URL: <a href="http://dx.doi.org/10.1002/path.905">http://dx.doi.org/10.1002/path.905</a>
	33-3900 was used in western blot to study the intercalated disc of the heart.
Human / Not Cited	Developmental biology (Feb 2013; 374: 264) <b>"The Xin repeat-containing protein, mXin, initiates the maturation of the intercalated discs during postnatal heart development."</b> Author(s):Wang Q,Lin JL,Chan SY,Lin JJ PubMed Article URL: <a href="http://dx.doi.org/10.1016/j.ydbio.2012.12.007">http://dx.doi.org/10.1016/j.ydbio.2012.12.007</a>
	33-3900 was used in western blot to study plakoglobin using hypomorphic mice.
Mouse / Not Cited	Genesis (New York, N.Y. : 2000) (Oct 2012; 50: 717) <b>"Analysis of a Jup hypomorphic allele reveals a critical threshold for postnatal viability."</b> Author(s):Swope D,Li J,Muller EJ,Radice GL PubMed Article URL: <a href="http://dx.doi.org/10.1002/dvg.22034">http://dx.doi.org/10.1002/dvg.22034</a>
	33-3900 was used in western blot to examine adhesion- versus a beta-catenin signaling-dependent mechanisms of E-cadherin tumor suppressor activity.
Human / Not Cited	The Journal of cell biology (May 2001; 153: 1049) <b>"E-cadherin suppresses cellular transformation by inhibiting beta-catenin signaling in an adhesion-independent manner."</b> Author(s):Gottardi CJ,Wong E,Gumbiner BM PubMed Article URL: <a href="http://dx.doi.org/10.1083/jcb.153.5.1049">http://dx.doi.org/10.1083/jcb.153.5.1049</a>
	33-3900 was used in immunoprecipitation and western blot to assess the functional significance of N-cadherin in melanoma cells.
Human / Not Cited	Cancer research (May 2001; 61: 3819) <b>"N-cadherin-mediated intercellular interactions promote survival and migration of melanoma cells."</b> Author(s):Li G,Satyamoorthy K,Herlyn M PubMed Article URL: <a href="http://www.ncbi.nlm.nih.gov/pubmed/11325858">http://www.ncbi.nlm.nih.gov/pubmed/11325858</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

	33-3900 was used in western blot to characterize two clones from triple negative breast MDA-MB-231 cancer cells
Human / 1:500	<p>Experimental cell research (Nov 2015; 339: 67)</p> <p><b>"Heterogeneity between triple negative breast cancer cells due to differential activation of Wnt and PI3K/AKT pathways."</b></p> <p>Author(s):Martínez-Revollar G,Garay E,Martin-Tapia D,Nava P,Huerta M,Lopez-Bayghen E,Meraz-Cruz N,Segovia J, González-Mariscal L</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1016/j.yexcr.2015.10.006">http://dx.doi.org/10.1016/j.yexcr.2015.10.006</a></p>
Human / Not Cited	<p>33-3900 was used in immunohistochemistry (paraffin) to discuss using expression of cadherins and catenins as prognosis markers for cancer.</p> <p>Journal of mammary gland biology and neoplasia (Jul 2001; 6: 275)</p> <p><b>"Cadherin junctions in mammary tumors."</b></p> <p>Author(s):Wheelock MJ,Soler AP,Knudsen KA</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1023/a:1011319507155">http://dx.doi.org/10.1023/a:1011319507155</a></p>
Human / 1:100	<p>33-3900 was used in immunohistochemistry to characterize the expression of a number of proteins in tissues from pseudomyxoma peritonei patients.</p> <p>Human pathology (Aug 2010; 41: 1109)</p> <p><b>"Exploring the peritoneal surface malignancy phenotype--a pilot immunohistochemical study of human pseudomyxoma peritonei and derived animal models."</b></p> <p>Author(s):Flatmark K,Davidson B,Kristian A,Stavnes HT,Førsund M,Reed W</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1016/j.humpath.2009.12.013">http://dx.doi.org/10.1016/j.humpath.2009.12.013</a></p>
Human / 1:20	<p>33-3900 was used in immunohistochemistry to study expression of E- and N-cadherin in mesotheliomas and adenocarcinomas.</p> <p>Human pathology (Aug 2003; 34: 749)</p> <p><b>"Value of E-cadherin and N-cadherin immunostaining in the diagnosis of mesothelioma."</b></p> <p>Author(s):Ordóñez NG</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1016/s0046-8177(03)00285-5">http://dx.doi.org/10.1016/s0046-8177(03)00285-5</a></p>
Human / Not Cited	<p>33-3900 was used in western blot to investigate how CaSm promotes pancreatic cancer</p> <p>Oncogenesis (Jan 2016; 5: )</p> <p><b>"The CaSm (LSm1) oncogene promotes transformation, chemoresistance and metastasis of pancreatic cancer cells."</b></p> <p>Author(s):Little EC,Camp ER,Wang C,Watson PM,Watson DK,Cole DJ</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1038/oncsis.2015.45">http://dx.doi.org/10.1038/oncsis.2015.45</a></p>
Mouse / 1:100	<p>33-3900 was used in immunohistochemistry (paraffin) to investigate the role of N-cadherin in cardiogenesis.</p> <p>Development (Cambridge, England) (Feb 2001; 128: 459)</p> <p><b>"Rescuing the N-cadherin knockout by cardiac-specific expression of N- or E-cadherin."</b></p> <p>Author(s):Luo Y,Ferreira-Cornwell M,Baldwin H,Kostetskii I,Lenox J,Lieberman M,Radice G</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1242/dev.128.4.459">http://dx.doi.org/10.1242/dev.128.4.459</a></p>
Mouse / 1:200	<p>33-3900 was used in immunohistochemistry - paraffin section and western blot to study the role of the Rac1 GTPase the shaping of the ocular lens</p> <p>Developmental biology (Dec 2011; 360: 30)</p> <p><b>"Rac1 GTPase-deficient mouse lens exhibits defects in shape, suture formation, fiber cell migration and survival."</b></p> <p>Author(s):Maddala R,Chauhan BK,Walker C,Zheng Y,Robinson ML,Lang RA,Rao PV</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1016/j.ydbio.2011.09.004">http://dx.doi.org/10.1016/j.ydbio.2011.09.004</a></p>
Human / 1:1000	<p>33-3900 was used in western blot to develop and characterize a novel three-dimensional cell culture model of ovarian endometriosis.</p> <p>Journal of ovarian research (Feb 2014; 7: )</p> <p><b>"Novel three-dimensional in vitro models of ovarian endometriosis."</b></p> <p>Author(s):Brueggmann D,Templeman C,Starzinski-Powitz A,Rao NP,Gayther SA,Lawrenson K</p> <p>PubMed Article URL:<a href="http://dx.doi.org/10.1186/1757-2215-7-17">http://dx.doi.org/10.1186/1757-2215-7-17</a></p>
Human / Not Cited	<p>33-3900 was used in immunohistochemistry (paraffin) to assess the incidence and prognostic significance of the epithelial to mesenchymal transition in cancer of unknown primary.</p> <p>Anticancer research (Apr 2012; 32: 1273)</p> <p><b>"Immunohistochemical study of the epithelial-mesenchymal transition phenotype in cancer of unknown primary: incidence, correlations and prognostic utility."</b></p> <p>Author(s):Stoyianni A,Goussia A,Pentheroudakis G,Siozopoulou V,Ioachim E,Krikelis D,Golfinopoulos V,Cervantes A, Bobos M,Fotsis T,Bellou S,Fountzilias G,Malamou-Mitsi V,Pavlidis N</p> <p>PubMed Article URL:<a href="http://www.ncbi.nlm.nih.gov/pubmed/22493359">http://www.ncbi.nlm.nih.gov/pubmed/22493359</a></p>

## 1 Immunoprecipitation References

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.



Species / Dilution	Summary
Rat / Not Cited	FASEB journal : official publication of the Federation of American Societies for Experimental Biology (Jun 2008; 22: 1945) <b>"Blood-testis barrier dynamics are regulated by testosterone and cytokines via their differential effects on the kinetics of protein endocytosis and recycling in Sertoli cells."</b> Author(s):Yan HH,Mruk DD,Lee WM,Cheng CY PubMed Article URL: <a href="http://dx.doi.org/10.1096/fj.06-070342">http://dx.doi.org/10.1096/fj.06-070342</a>

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.