Website: thermofisher.com
Customer Service (US): 1 800 955 6288 ext. 1
Technical Support (US): 1 800 955 6288 ext. 441
thermofisher.com/contactus

Performance guaranteed

p53 Monoclonal Antibody (DO-7)

Catalog Number MA5-12557

Product data sheet

Details	
Size	500 µL
Host/Isotope	Mouse / IgG2b, kappa
Class	Monoclonal
Type	Antibody
Clone	DO-7
Immunogen	Recombinant human wild-type p53 protein expressed in E. coli
Conjugate	Unconjugated
Form	Liquid
Concentration	0.05 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4
Contains	0.05% sodium azide
Storage Conditions	-20°C

Species Reactivity	
Species reactivity	Bovine, Human
Published species	Rat, Human, Mouse, Not Applicable

Tested Applications	Dilution *
ChIP assay (ChIP)	Assay-dependent
Flow Cytometry (Flow)	1:50
Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:200
Immunoprecipitation (IP)	1:50-1:100
Western Blot (WB)	1:500-1:1,000
Immunocytochemistry (ICC/IF)	1:20-1:200

Published Applications	
Western Blot (WB)	See 35 publications below
Immunohistochemistry (IHC)	See 97 publications below
Immunoprecipitation (IP)	See 2 publications below
Immunocytochemistry (ICC/IF)	See 4 publications below
Immunohistochemistry (Frozen) (IHC (F))	See 1 publications below
Flow Cytometry (Flow)	See 1 publications below
Miscellaneous PubMed (Misc)	See 5 publications below
Immunohistochemistry (Paraffin) (IHC (P))	See 5 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

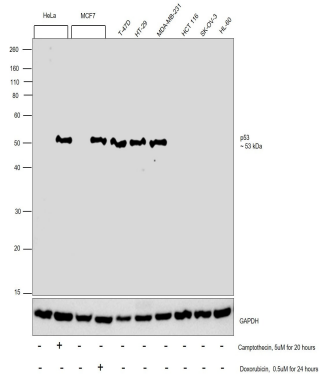
MA5-12557 targets p53 in FACS, ICC/IF, IHC (P), IP, ChIP, and WB applications and shows reactivity with Human and bovine samples. This antibody is not suitable for mouse colon tissue in IHC applications. The MA5-12557 immunogen is recombinant human wild-type p53 protein expressed in E. coli. This antibody was orginally validated as part of a Thermo Scientific Cellomics High Content Screening Kit. The antibody sold separately may have slightly different performance and may need to be further optimized for the best results.

Background/Target Information

The tumor suppressor protein, p53, is a sequence specific transcription factor that is activated by cellular stress. p53 mediates cell cycle arrest or apoptosis in response to DNA damage or starvation for pyrimidine nucleotides. p53 is up-regulated in response to stress signals and stimulated to activate transcription of specific genes, resulting in expression of p21waf1 and other proteins involved in G1 or G2/M arrest. The structure of p53 comprises an N-terminal transactivation domain, a central DNA-binding domain, an oligomerisation domain, and a C-terminal regulatory domain. There are various phosphorylation sites on p53, of which the phosphorylation at Ser15 is important for p53 activation and stabilization. p53 has been characterized to play a role in blocking the proliferative action of damaged cells and act as an anticancer agent. Phosphorylation of Ser392 in p53 has been shown to associate with the formation of human tumors. In addition, p53 has also been linked to the effects of aging and oxidative stress and an increase in p53 has been linked to deficits in LTP (Long Term Potentiation) in learning and memory. p53 is found in very low levels in normal cells, however, in a variety of transformed cell lines, it is expressed in high amounts, and believed to contribute to transformation and malignancy. Mutants of p53 that frequently occur in a number of different human cancers fail to bind the consensus DNA binding site, and cause the loss of tumor suppressor activity. Alterations of the TP53 gene occur not only as somatic mutations in human malignancies, but also as germline mutations in some cancer-prone families such as Li-Fraumeni syndrome.

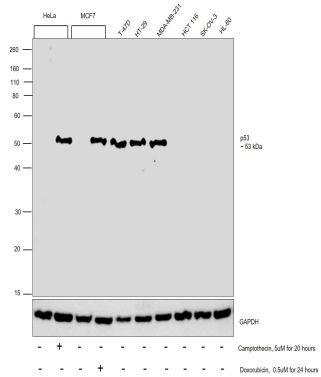
For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Product Images For p53 Monoclonal Antibody (DO-7)



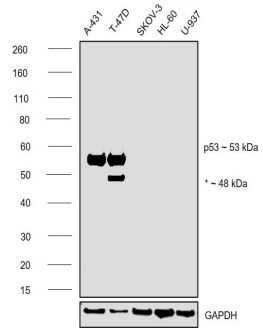
p53 Antibody (MA5-12557)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell lines owing to their inherent genetic constitution. Relative expression of Cellular tumor antigen p53 was observed in T-47D, HT-29 and MDA-MB-231 which are reported to be positive and not in other cell lines like HCT 116, SK-OV-3 and HL-60 using Anti-p53 Monoclonal Antibody (DO-7) (Product # MA5-12557) in Western Blot. {RE}



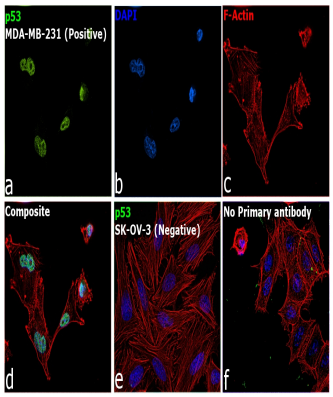
p53 Antibody (MA5-12557) in WB

Western blot was performed using Anti-p53 Monoclonal Antibody (DO-7) (Product # MA5-12557) and a 53 kDa band corresponding to Cellular tumor antigen p53 was observed across cell lines except HCT 116, SK-OV-3 and HL-60 which are reported to be negative, also it was observed to be induced upon Camptothecin and Doxorubicin treatment in HeLa and MCF7 respectively. Modified whole cell extracts (1%SDS) (30 µg lysate) of HeLa (Lane 1), HeLa treated with Camptothecin (5uM for 20 hours) (Lane 2), MCF7 (Lane 3), MCF7 treated with Doxorubicin (0.5uM for 24 hours) (Lane 4), T-47D (Lane 5), HT-29 (Lane 6), MDA-MB-231 (Lane 7), HCT 116 (Lane 8), SK-O-V3 (Lane 9) and HL-60 (Lane 10) were electrophoresed using NuPAGE™ 10% Bis-Tris Protein Gel (Product # NP0302BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000 dilution) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



p53 Antibody (MA5-12557) in WB

Western blot was performed using Anti-p53 Monoclonal Antibody (DO-7) (Product # MA5-12557) and a ~53 kDa band corresponding to TP53 was observed across cell lines tested . Whole cell extracts (30 µg lysate) of A-431 (Lane 1), T-47D (Lane 2), SK-O-V3 (Lane 3), HL-60 (Lane 4), U-937 (Lane 5) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0321BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177,1:20000) using the iBright™ FL1500 Imaging System (Product # A44115). Chemiluminescent detection was performed using SuperSignal™ West Atto Ultimate Sensitivity Substrate (Product # A38556).

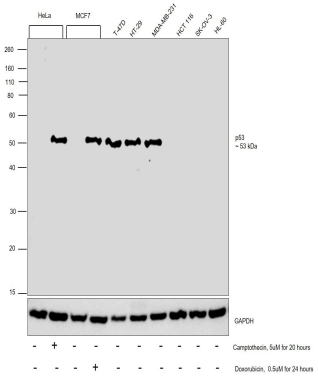


p53 Antibody (MA5-12557)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell models owing to their inherent genetic constitution. Immunofluorescence analysis using Anti-p53 Monoclonal Antibody (DO-7) (Product # MA5-12557), shows expression of p53 in MDA-MB-231 when compared to SK-OV-3. {RE}

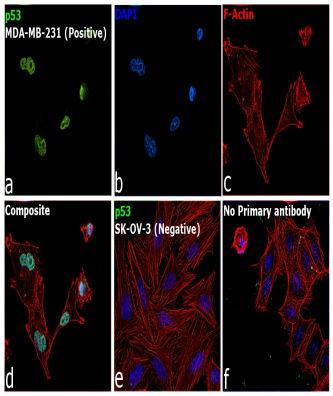
Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus



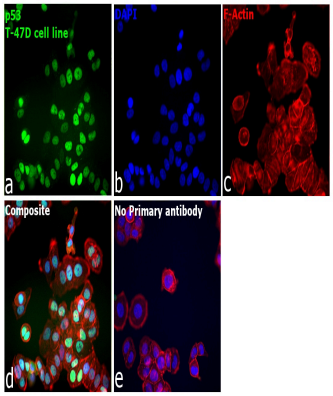
p53 Antibody (MA5-12557)

Altered expression of proteins upon cell treatment demonstrates antibody specificity. Western blot using p53 Monoclonal Antibody (DO-7) (Product # MA5-12557), shows induction of proteins in HeLa and MCF7 on Camptothecin and Doxorubicin treatments respectively. {TM}



p53 Antibody (MA5-12557) in ICC/IF

Immunofluorescence analysis of Cellular tumor antigen p53 was performed using 70% confluent log phase MDA-MB-231 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with p53 Monoclonal Antibody (DO-7) (Product # MA5-12557) at 1:100 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Donkey anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32766), (1:2000 dilution), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b: Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing Nuclear localization. Panel e represents SK-OV-3 cells having no expression of p53. Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.



p53 Antibody (MA5-12557) in ICC/IF

Immunofluorescence analysis of TP53 was performed using 70% confluent log phase T-47D cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with p53 Monoclonal Antibody (DO-7) (Product # MA5-12557) at 1:100 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Donkey anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32766), (1:2000), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b:Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing nuclear localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 40X magnification.

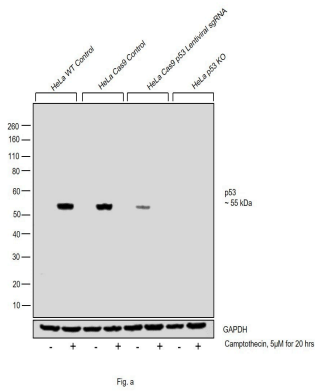


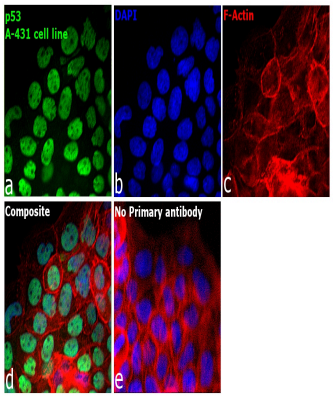
Fig. a

p53 Antibody (MA5-12557)

Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A loss of signal was observed for target protein in p53 KO cell line compared to control cell line using Anti-p53 Monoclonal Antibody (DO-7) (Product # MA5-12557). {KO}

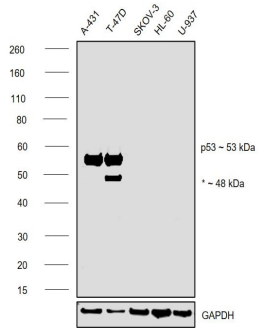
Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus



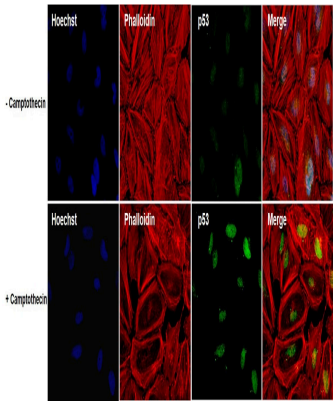
p53 Antibody (MA5-12557) in ICC/IF

Immunofluorescence analysis of TP53 was performed using 70% confluent log phase A-431 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with p53 Monoclonal Antibody (DO-7) (Product # MA5-12557) at 1:100 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Donkey anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32766), (1:2000), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b:Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing nuclear localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 40X magnification.



p53 Antibody (MA5-12557)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell lines owing to their inherent genetic constitution. Relative expression of TP53 was observed as increased expression in A-431 and T-47D as compared to other cell lines using Anti-p53 Monoclonal Antibody (DO-7) (Product # MA5-12557) in Western Blot. {RE}



p53 Antibody (MA5-12557) in ICC/IF

Immunofluorescent analysis of p53 (green) in untreated and 5 µM 20 hours Camptothecin treated HeLa cells. The cells were fixed with 4% paraformaldehyde for 15 minutes at -20c, permeabilized with 0.1% Triton X-100 for 15 minutes, and blocked with 3% BSA for 30 minutes at room temperature. Cells were stained with a p53 mouse monoclonal antibody (Product # MA5-12557) at a dilution of 1:200 in blocking buffer for 1 hour at room temperature, and then incubated with a Goat anti-Mouse IgG (H+L) Secondary Antibody, Alexa Fluor Plus 488 conjugate (Product # A32731) at a dilution of 1:500 for at least 30 minutes at a room temperature in the dark (green). F-actin (red) was stained by Dylight 554 Phalloidin (Product #21834) and nuclei (blue) were stained with Hoechst 33342 (Product # 62249). Images were taken on a Thermo Scientific ToxInsight Instrument at 20X magnification.

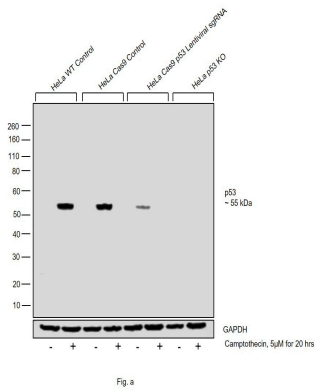


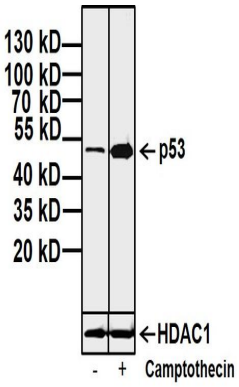
Fig. a

p53 Antibody (MA5-12557) in WB

Knockout of p53 was achieved by CRISPR-Cas9 genome editing using LentiArray™ Lentiviral sgRNA (Product # A32042, Assay ID CRISPR718517_LV) and LentiArray Cas9 Lentivirus (Product # A32064). Western blot analysis of p53 was performed by loading 30 µg of HeLa Wild Type (Lane 1), Treated HeLa Wild type (Lane 2), HeLa Cas9 (Lane 3), Treated HeLa Cas9 (Lane 4), HeLa Cas9 cells transduced with p53 Lentiviral sgRNA (Lane 5), Treated HeLa Cas9 cells transduced with p53 Lentiviral sgRNA (Lane 6), HeLa p53 KO (Lane 7) and Treated HeLa p53 KO (Lane 8) whole cell 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 Anti-p53 Monoclonal Antibody (DO-7) (Product # MA5-12557, 1:1,000 dilution) and Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:4,000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using SuperSignal™ West Dura Extended Duration Substrate (Product # 34076). Loss of signal upon CRISPR mediated knockout (KO) using the LentiArray™ CRISPR product line confirms that antibody is specific to p53. *Treatment done with 5 µM Camptothecin for 20 hrs.

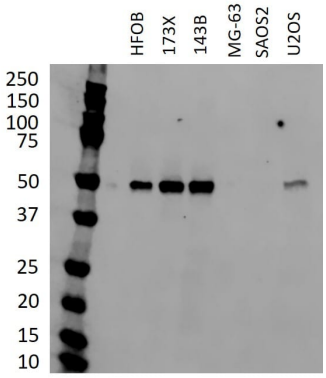
Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus



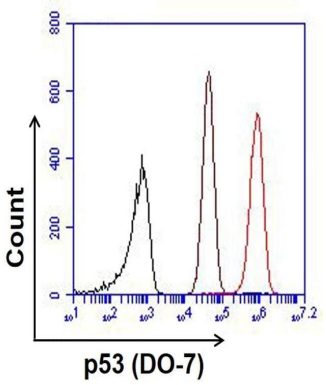
p53 Antibody (MA5-12557) in WB

Western blot analysis of p53 was performed by loading 20 µg HeLa nuclear cell lysate per lane (untreated or treated with 20 µM Camptothecin for 20 hours) and 7 µl of PageRuler Plus Prestained Protein Ladder (Product # 26619) per well onto a 4-20% Tris-Glycine polyacrylamide gel (Product # WT4202BX10). Proteins were transferred to a nitrocellulose membrane using the G2 Blotter (Product # 62288), and blocked with 5% Milk in TBST for 1 hour at room temperature. p53 was detected at ~53 kDa using a p53 mouse monoclonal antibody (Product # MA5-12557) at a dilution of 1:1000 in blocking buffer overnight at 4°C on a rocking platform, followed by a Goat anti-Mouse IgG (H+L) Secondary Antibody, HRP conjugate (Product # 31430) at a dilution of 1:20,000 for at least 30 minutes at room temperature. HDAC1 was detected using a HDAC1 rabbit polyclonal antibody (Product # PA1-860) at a concentration of 1 µg/mL. Chemiluminescent detection was performed using SuperSignal West Pico (Product # 34078).



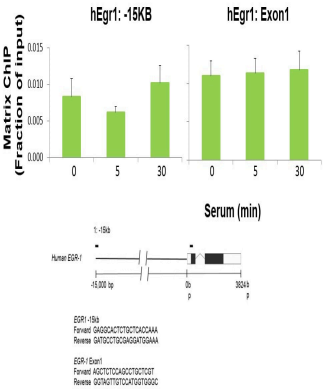
p53 Antibody (MA5-12557) in WB

Western blot analysis of p53 was performed by loading whole-cell lysates of five human osteosarcoma cell lines and non-transformed human osteoblasts (HFOB). p53 was detected at approximately 53 kDa using a p53 monoclonal antibody (Product # MA5-12557) at a dilution of 1:1000 in Blocking Buffer (Product # 37543) overnight at 4°C on a rocking platform, followed by a 1-hour room-temperature incubation of a goat anti-mouse IgG antibody at a dilution of 1:5000. Data courtesy of Thermo Scientific KOL Program.



p53 Antibody (MA5-12557) in Flow

Flow cytometry analysis of p53 was done on HeLa cells. The cells were fixed, permeabilized and stained with a p53 mouse monoclonal antibody (Product # MA5-12557, red histogram) or Mouse IgG2b isotype control (Product # MA5-14447, blue histogram) at a concentration of 10 µg/mL. Black histogram represents negative control unstained cell population. After incubation of the primary antibody on ice for an hour, the cells were stained with a Goat anti-Mouse IgG (H+L) Secondary Antibody, Alexa Fluor Plus 680 conjugate (Product # A32734) at a dilution of 1:50 for at least 30 minutes on ice. A representative 10,000 cells were acquired for each sample.

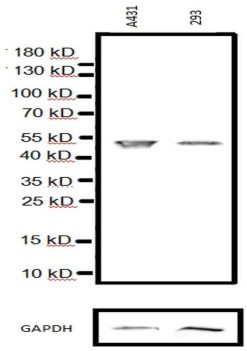


p53 Antibody (MA5-12557) in ChIP

Multiplex microplate Matrix ChIP has been described in detail (http://www.ncbi.nlm.nih.gov/pubmed/25959381). Briefly HTC116 cells were starved followed by addition of serum and samples of cells were cross-linked with formaldehyde after the time points indicated on the x-axis (0, 5 and 30 min). Chromatin was sheared using a Bioruptor and ChIP assays were performed using protein A-coated 96-well polypropylene microplates with 1 µL/100uL well volume of p53 monoclonal antibody (Product # MA5-12557). Quantitative real-time PCRs were performed in quadruplicate using 1-2 µL of DNA with primers to -15kb downstream of Egr1 and exon 1 of Erg1. PCR calibration curves were generated for each primer pair from a dilution series of total human genomic DNA. The PCR primer efficiency curve was fit to cycle threshold (Ct) versus log [genomic DNA concentration] by using an r2 best fit. DNA concentration values for each ChIP and input DNA sample were calculated from their respective average Ct values. Final results are expressed as fraction of input DNA. Schematic representations of Erg1 loci is shown where boxes represent exons (black boxes = translated regions, white boxes = untranslated regions), the zigzag line represents an intron, and the straight line represents upstream sequence. Regions amplified by the primers are represented by black bars. Data courtesy of Dr. Karol Bomsztyk's laboratory.

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus



p53 Antibody (MA5-12557) in WB

Western blot analysis of p53 was performed by loading 20 µg of indicated whole cell lysates per lane and 7 µl of PageRuler Plus Prestained Protein Ladder (Product # 26619) per well onto a 4-20% Tris-Glycine polyacrylamide gel (Product # WT4202BX10). Proteins were transferred to a nitrocellulose membrane using the G2 Blotter (Product # 62288), and blocked with 5% Milk in TBST for 1 hour at room temperature. p53 was detected at ~53 kDa using a p53 mouse monoclonal antibody (Product # MA5-12557) at a dilution of 1:1000 in blocking buffer overnight at 4°C on a rocking platform, followed by a Goat anti-Mouse IgG (H+L) Secondary Antibody, HRP conjugate (Product # 31430) at a dilution of 1:20,000 for at least 30 minutes at room temperature. GAPDH was detected using a GAPDH rabbit polyclonal antibody, HRP conjugate (Product # PA1-987-HRP) at a dilution of 1:1000 overnight at 4°C on a rocking platform.Chemiluminescent detection was performed using SuperSignal West Pico (Product # 34078).

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

PubMed References For p53 Monoclonal Antibody (DO-7)

35 Western Blot References

Species / Dilution	Summary
Human / Not Cited	MA5-12557 was used in Western Blotting to show the effect of structurally diverse BET inhibitors on SIRT1 levels is divergent, and the responses might also be cell type-dependent. Gene (May 2020; 741:) **"Impact of structurally diverse BET inhibitors on SIRT1."** Author(s):Tenhunen J,Kokkola T,Huovinen M,Rahnasto-Rilla M,Lahtela-Kakkonen M PubMed Article URL:http://dx.doi.org/10.1016/j.gene.2020.144558
Mouse / 1:1000	MA5-12557 was used in western blot to investigate the effect of glutathione on chromosome aberrations, cell cycle kinetics, and cell cycle regulator proteins International journal of radiation biology (May 2007; 83: 347) **"Influence of glutathione on the induction of chromosome aberrations, delay in cell cycle kinetics and cell cycle regulator proteins in irradiated mouse bone marrow cells."** Author(s):Ray S,Chatterjee A PubMed Article URL:http://dx.doi.org/10.1080/09553000701317887
Mouse / 1:500	MA5-12557 was used in western blot to study the role of TGF-beta inhibitors in abolishing the resistance of glioblastoma to ionozing radiation therapy Cancer research (Aug 2012; 72: 4119) **"Resistance of glioblastoma-initiating cells to radiation mediated by the tumor microenvironment can be abolished by inhibiting transforming growth factor-."** Author(s):Hardee ME,Marciscano AE,Medina-Ramirez CM,Zagzag D,Narayana A,Lonning SM,Barcellos-Hoff MH PubMed Article URL:http://dx.doi.org/10.1158/0008-5472.CAN-12-0546
Human / 1:1000	MA5-12557 was used in Western Blot to indicate that GAS5 participated in the development of OA by regulating the biological behavior of chondrocytes via the miR,34a/Bcl,2 axis. Molecular medicine reports (Mar 2020; 21: 1310) **"Silencing of longchain noncoding RNA GAS5 in osteoarthritic chondrocytes is mediated by targeting the miR34a /Bcl2 axis."** Author(s):Ji Q,Qiao X,Liu Y,Wang D,Yan J PubMed Article URL:http://dx.doi.org/10.3892/mmr.2019.10900
Human / 1:200	MA5-12557 was used in Western Blotting to investigate snake-venom-induced adaptive response at a relatively noncytotoxic concentration (0.01 µg/ml) in two human fibroblast cell lines of different origin, namely WI-38 fetal lung fibroblasts and BJ foreskin fibroblasts. Journal of cellular physiology (May 2019; 234: 6147) **"Snake venoms promote stress-induced senescence in human fibroblasts."** Author(s):Lewinska A,Bocian A,Petrilla V,Adamczyk-Grochala J,Szymura K,Hendzel W,Kaleniuk E,Hus KK,Petrillova M, Wnuk M PubMed Article URL:http://dx.doi.org/10.1002/jcp.27382
Not Applicable / 1:1000	MA5-12557 was used in western blot to isolate ubiquitin functional conformations that act as potent and selective USP7 inhibitors Nature chemical biology (Jan 2013; 9: 51) **"Conformational stabilization of ubiquitin yields potent and selective inhibitors of USP7."** Author(s):Zhang Y,Zhou L,Rouge L,Phillips AH,Lam C,Liu P,Sandoval W,Helgason E,Murray JM,Wertz IE,Corn JE PubMed Article URL:http://dx.doi.org/10.1038/nchembio.1134
Human / 1:500	MA5-12557 was used in western blot to study the effects of 2-methoxyestradiol on the growth and apoptosis of human hepatocellular carcinoma cells Journal of gastroenterology and hepatology (Jul 2006; 21: 1207) **"A very low toxic agent induces apoptosis and reduces growth of human hepatocellular carcinoma cells."** Author(s):Schumacher G,Scheunert S,Rueggeberg A,Bachem MG,Nussler AK,Spinelli A,Mukhopadhyay T,Pratschke J, Neuhaus P PubMed Article URL:http://dx.doi.org/10.1111/j.1440-1746.2006.04327.x
Mouse / 1:200	MA5-12557 was used in Western Blotting to study the effect of AZD7762 on mammary tumour cells and bone cells. International journal of oncology (Sep 2018; 53: 1001) **"Effects of a checkpoint kinase inhibitor, AZD7762, on tumor suppression and bone remodeling."** Author(s):Wang L,Wang Y,Chen A,Jalali A,Liu S,Guo Y,Na S,Nakshatri H,Li BY,Yokota H PubMed Article URL:http://dx.doi.org/10.3892/ijo.2018.4481

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in western blot to study the enhancement of cisplatin-induced cytotoxicity and apoptosis in head and neck cancer by a p53-reactivating small-molecule
Human / Not Cited	Cancer letters (Dec 2012; 325: 35) **"The p53-reactivating small-molecule RITA enhances cisplatin-induced cytotoxicity and apoptosis in head and neck cancer."** Author(s):Roh JL,Ko JH,Moon SJ,Ryu CH,Choi JY,Koch WM PubMed Article URL:http://dx.doi.org/10.1016/j.canlet.2012.05.020
	MA5-12557 was used in western blot to study the mechanism by which DeltaNp63alpha is targeted for proteasomal degradation in head and neck squamous cell carcinoma cells
Human / Not Cited	Cell cycle (Georgetown, Tex.) (Oct 2004; 3: 1285) **"RACK1 and stratifin target DeltaNp63alpha for a proteasome degradation in head and neck squamous cell carcinoma cells upon DNA damage."** Author(s):Fomenkov A,Zangen R,Huang YP,Osada M,Guo Z,Fomenkov T,Trink B,Sidransky D,Ratovitski EA PubMed Article URL:http://dx.doi.org/10.4161/cc.3.10.1155
	MA5-12557 was used in western blot to study the effect of p53 status on the sensitization of human tumour cells to hyperthermia by a plant flavonol
Human / Not Cited	International journal of hyperthermia : the official journal of European Society for Hyperthermic Oncology, North American Hyperthermia Group (Aug 2008; 24: 415) **"p53 status-dependent sensitization of human tumour cells to hyperthermia by plant flavonol."** Author(s):Hamamoto T,Suzuki K,Yamauchi M,Kodama S,Sasaki H,Watanabe M PubMed Article URL:http://dx.doi.org/10.1080/02656730802064613
	MA5-12557 was used in western blot to study the mechanism by which axin downregulatesTCF-4 transcription and inhibits lung cancer cell proliferation and invasiveness
Human / 1:200	Molecular cancer (Feb 2010; 9:) **"Axin downregulates TCF-4 transcription via beta-catenin, but not p53, and inhibits the proliferation and invasion of lung cancer cells."** Author(s):Yang LH,Xu HT,Han Y,Li QC,Liu Y,Zhao Y,Yang ZQ,Dong QZ,Miao Y,Dai SD,Wang EH PubMed Article URL:http://dx.doi.org/10.1186/1476-4598-9-25
	MA5-12557 was used in western blot to study the growth factor requirements and basal phenotype of an immortalized mammary epithelial cell line
Human / Not Cited	Cancer research (Jan 2002; 62: 89) **"Growth factor requirements and basal phenotype of an immortalized mammary epithelial cell line."** Author(s):DiRenzo J,Signoretti S,Nakamura N,Rivera-Gonzalez R,Sellers W,Loda M,Brown M PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/11782364
	MA5-12557 was used in western blot to study the molecular and cellular biology of high nitric oxide-adapted human tongue squamous cell carcinoma cell lines
Human / Not Cited	Tumour biology : the journal of the International Society for Oncodevelopmental Biology and Medicine (Feb 2011; 32: 87) **"Part II. Initial molecular and cellular characterization of high nitric oxide-adapted human tongue squamous cell carcinoma cell lines."** Author(s):Tarjan G,Haines GK,Vesper BJ,Xue J,Altman MB,Yarmolyuk YR,Khurram H,Elseth KM,Roeske JC,Aydogan B,Radosevich JA PubMed Article URL:http://dx.doi.org/10.1007/s13277-010-0102-0
	MA5-12557 was used in western blot to study the role of MDM2 antagonists in activating p53 and synergizing with genotoxic drugs in B-cell chronic lymphocytic leukemia cells
Human / Not Cited	Blood (May 2006; 107: 4109) **"MDM2 antagonists activate p53 and synergize with genotoxic drugs in B-cell chronic lymphocytic leukemia cells."** Author(s):Coll-Mulet L,Iglesias-Serret D,Santidrián AF,Cosialls AM,de Frias M,Castaño E,Campàs C,Barragán M,de Sevilla AF,Domingo A,Vassilev LT,Pons G,Gil J PubMed Article URL:http://dx.doi.org/10.1182/blood-2005-08-3273
	MA5-12557 was used in western blot to study the different molecular phenotype and tumorigenicity of 5 breast cancer cell lines derived from a single patient
Human / Not Cited	PloS one (Jul 2013; 8:) **"Multiple breast cancer cell-lines derived from a single tumor differ in their molecular characteristics and tumorigenic potential."** Author(s):Mosoyan G,Nagi C,Marukian S,Teixeira A,Simonian A,Resnick-Silverman L,DiFeo A,Johnston D,Reynolds SR,Roses DF,Mosoian A PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0055145

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in Western Blot to study the effect of combined inhibition of AXL and HDACs in diffuse intrinsic pontine glioma cells.
Mouse / 1:1000	Clinical cancer research : an official journal of the American Association for Cancer Research (Jul 2020; 26: 3319) **"Combined Therapy of AXL and HDAC Inhibition Reverses Mesenchymal Transition in Diffuse Intrinsic Pontine Glioma."** Author(s):Meel MH,de Gooijer MC,Metselaar DS,Sewing ACP,Zwaan K,Waranecki P,Breur M,Buil LCM,Lagerweij T, Wedekind LE,Twisk JWR,Koster J,Hashizume R,Raabe EH,Montero Carcaboso Á,Bugiani M,Phoenix TN,van Tellingen O, van Vuurden DG,Kaspers GJL,Hulleman E PubMed Article URL:http://dx.doi.org/10.1158/1078-0432.CCR-19-3538
	MA5-12557 was used in Western Blotting to demonstrate a new approach for identifying tumorigenic drivers from genomic regions highly susceptible to ER-related chromothripsis.
Human / 1:500	BMC medical genomics (May 2020; 13:) **"ER-related chromothripsis enhances concordant gene transcription on chromosome 17q11.1-q24.1 in luminal breast cancer."** Author(s):Lin CL,Tan X,Chen M,Kusi M,Hung CN,Chou CW,Hsu YT,Wang CM,Kirma N,Chen CL,Lin CH,Lathrop KI, Elledge R,Kaklamani VG,Mitsuya K,Huang TH PubMed Article URL:http://dx.doi.org/10.1186/s12920-020-0729-7
	MA5-12557 was used in Western Blotting to investigate the effects of a rotating magnetic field (RMF; 0.2 T, 4 Hz) on the growth of human umbilical vein endothelial cells (HUVECs) and Caenorhabditis elegans.
Human / 1:1000	Aging (Nov 2019; 11: 10385) **"Rotating magnetic field delays human umbilical vein endothelial cell aging and prolongs the lifespan of Caenorhabditis elegans."** Author(s):Xu J,Liu K,Chen T,Zhan T,Ouyang Z,Wang Y,Liu W,Zhang X,Sun Y,Xu G,Wang X PubMed Article URL:http://dx.doi.org/10.18632/aging.102466
	MA5-12557 was used in western blot to study the mechanism by which p53 loss enhances IKKbeta catalytic activity
Mouse / Not Cited	Proceedings of the National Academy of Sciences of the United States of America (Mar 2009; 106: 3431) **"Loss of p53 enhances catalytic activity of IKKbeta through O-linked beta-N-acetyl glucosamine modification."** Author(s):Kawauchi K,Araki K,Tobiume K,Tanaka N PubMed Article URL:http://dx.doi.org/10.1073/pnas.0813210106
	MA5-12557 was used in western blot to study the role of glutathione levels in the genotoxic effects of raw betel-nut extract in mammalian cells
Mouse / Not Cited	Mutation research (Jul 2003; 538: 1) **"Genotoxic effect of raw betel-nut extract in relation to endogenous glutathione levels and its mechanism of action in mammalian cells."** Author(s):Kumpawat K,Deb S,Ray S,Chatterjee A PubMed Article URL:http://dx.doi.org/10.1016/s1383-5718(03)00048-2
	MA5-12557 was used in western blot to study the proteomics of selected prognostic factors in breast cancer
Human / 1:1000	Proteomics (Mar 2004; 4: 784) **"Proteomic analysis of selected prognostic factors of breast cancer."** Author(s):Roberts K,Bhatia K,Stanton P,Lord R PubMed Article URL:http://dx.doi.org/10.1002/pmic.200300633
	MA5-12557 was used in western blot to study the ability of prodigiosin to induce apoptosis in primary B- and T-cells from patients with B-cell chronic lymphocytic leukemia
Human / Not Cited	Leukemia (Apr 2003; 17: 746) **"Prodigiosin induces apoptosis of B and T cells from B-cell chronic lymphocytic leukemia."** Author(s):Campàs C,Dalmau M,Montaner B,Barragán M,Bellosillo B,Colomer D,Pons G,Pérez-Tomás R,Gil J PubMed Article URL:http://dx.doi.org/10.1038/sj.leu.2402860
	MA5-12557 was used in Western Blotting to investigate whether the anti-HIV effect of lactobacilli is mediated by extracellular vesicles released by these bacteria.
Human / Not Cited	Nature communications (Dec 2019; 10:) **"Extracellular vesicles from symbiotic vaginal lactobacilli inhibit HIV-1 infection of human tissues."** Author(s):Ñahui Palomino RA,Vanpouille C,Laghi L,Parolin C,Melikov K,Backlund P,Vitali B,Margolis L PubMed Article URL:http://dx.doi.org/10.1038/s41467-019-13468-9
	MA5-12557 was used in western blot to study the mechanism by which Delta-like 1 contributes to cell growth in hepatocellular carcinoma
Human / 1:400	Liver international : official journal of the International Association for the Study of the Liver (May 2010; 30: 703) **"Delta-like 1 contributes to cell growth by increasing the interferon-inducible protein 16 expression in hepatocellular carcinoma."** Author(s):Yu F,Hao X,Zhao H,Ge C,Yao M,Yang S,Li J PubMed Article URL:http://dx.doi.org/10.1111/j.1478-3231.2010.02214.x

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in western blot to study the induction of apoptosis in chronic lymphocytic leukemia cells by Akt inhibitors
Human / Not Cited	Haematologica (Dec 2009; 94: 1698) **"Akt inhibitors induce apoptosis in chronic lymphocytic leukemia cells."** Author(s):de Frias M,Iglesias-Serret D,Cosialls AM,Coll-Mulet L,Santidrián AF,González-Gironès DM,de la Banda E,Pons G,Gil J PubMed Article URL:http://dx.doi.org/10.3324/haematol.2008.004028
	MA5-12557 was used in western blot to investigate the role of CDK2 in the MYCN over-expressing cancer cells
Human / Not Cited	Proceedings of the National Academy of Sciences of the United States of America (Aug 2009; 106: 12968) **"Inactivation of CDK2 is synthetically lethal to MYCN over-expressing cancer cells."** Author(s):Molenaar JJ,Ebus ME,Geerts D,Koster J,Lamers F,Valentijn LJ,Westerhout EM,Versteeg R,Caron HN PubMed Article URL:http://dx.doi.org/10.1073/pnas.0901418106
	MA5-12557 was used in western blot to study the mechanism by which Smad3 deletion confers radioprotection in primary dermal fibroblasts
Mouse / Not Cited	Journal of dermatological science (Oct 2007; 48: 35) **"Absence of Smad3 confers radioprotection through modulation of ERK-MAPK in primary dermal fibroblasts."** Author(s):Arany PR,Flanders KC,DeGraff W,Cook J,Mitchell JB,Roberts AB PubMed Article URL:http://dx.doi.org/10.1016/j.jdermsci.2007.05.012
	MA512557 was used in western blot to develop a method to examine protein oligomerization in cells using a single electrophoresis gel
Human / Not Cited	Analytical and bioanalytical chemistry (Feb 2016; 408: 1715) **"Tris-acetate polyacrylamide gradient gel electrophoresis for the analysis of protein oligomerization."** Author(s):Cubillos-Rojas M,Schneider T,Sánchez-Tena S,Bartrons R,Ventura F,Rosa JL PubMed Article URL:http://dx.doi.org/10.1007/s00216-015-9283-0
	MA5-12557 was used in western blot to assess links between telomere-dysfunction and centrosome defects in early breast carcinogenesis
Not Applicable / 1:1000	Oncotarget (Sep 2015; 6: 28238) **"Centrosome aberrations in human mammary epithelial cells driven by cooperative interactions between p16INK4a deficiency and telomere-dependent genotoxic stress."** Author(s):Domínguez D,Feijoo P,Bernal A,Ercilla A,Agell N,Genescà A,Tusell L PubMed Article URL:http://dx.doi.org/10.18632/oncotarget.4958
	MA5-12557 was used in western blot to report that p53 and DeltaNp63alpha are transcriptional partners for SMAD proteins.
Human / Not Cited	Molecular cancer research : MCR (Apr 2015; 13: 732) **"p53 and Np63 Coregulate the Transcriptional and Cellular Response to TGF and BMP Signals."** Author(s):Balboni AL,Cherukuri P,Ung M,DeCastro AJ,Cheng C,DiRenzo J PubMed Article URL:http://dx.doi.org/10.1158/1541-7786.MCR-14-0152-T
	MA5-12557 was used in western blot to perform a siRNA screeen to identify genes whose silencing increases cellular sensitivity to PARP inhibitors
Human / Not Cited	The EMBO journal (May 2008; 27: 1368) **"A synthetic lethal siRNA screen identifying genes mediating sensitivity to a PARP inhibitor."** Author(s):Turner NC,Lord CJ,Iorns E,Brough R,Swift S,Elliott R,Rayter S,Tutt AN,Ashworth A PubMed Article URL:http://dx.doi.org/10.1038/emboj.2008.61
	MA5-12557 was used in western blot to study the ability of acadesine to activate AMPK and promote apoptosis in B-cells but not in T-cells from patients with B-cell chronic lymphocytic leukemia
Human / Not Cited	Blood (May 2003; 101: 3674) **"Acadesine activates AMPK and induces apoptosis in B-cell chronic lymphocytic leukemia cells but not in T lymphocytes."** Author(s):Campàs C,Lopez JM,Santidrián AF,Barragán M,Bellosillo B,Colomer D,Gil J PubMed Article URL:http://dx.doi.org/10.1182/blood-2002-07-2339
	MA5-12557 was used in western blot to study the feasibility of using a random peptide microarray to map antibody epitopes
Human / Not Cited	Molecular & cellular proteomics : MCP (Mar 2011; 10:) **"Exploring antibody recognition of sequence space through random-sequence peptide microarrays."** Author(s):Halperin RF,Stafford P,Johnston SA PubMed Article URL:http://dx.doi.org/10.1074/mcp.M110.000786

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in western blot to study the interaction of cyclin G2 with DNA damage responses and the role of cyclin G2 in robust cell cycle arrest following doxorubicin treatment
Human / 1:1000	The Journal of biological chemistry (Jun 2012; 287: 22838) **"Elevated cyclin G2 expression intersects with DNA damage checkpoint signaling and is required for a potent G2 /M checkpoint arrest response to doxorubicin."** Author(s):Zimmermann M,Arachchige-Don AS,Donaldson MS,Dallapiazza RF,Cowan CE,Horne MC PubMed Article URL:http://dx.doi.org/10.1074/jbc.M112.376855

97 Immunohistochemistry References

Species / Dilution	Summary
	MA5-12557 was used in immunohistochemistry to evaluate the prognostic value of p53 expression in stage III non-small cell lung cancer
Human / 1:50	Anticancer research (Sep 2005; 25: 2385) **"Prognostic role of p53 in stage III non-small cell lung cancer."** Author(s):Berghmans T,Mascaux C,Martin B,Ninane V,Sculier JP PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/16080465
	MA5-12557 was used in immunohistochemistry to investigate the effect of galectin-3 and heparanase on the pathogenesis of endometrial carcinomas
Human / 1:300	Archives of gynecology and obstetrics (Nov 2011; 284: 1231) **"Investigation of galectin-3 and heparanase in endometrioid and serous carcinomas of the endometrium and correlation with known predictors of survival."** Author(s):Ege CB,Akbulut M,Zekiolu O,Ozdemir N PubMed Article URL:http://dx.doi.org/10.1007/s00404-010-1766-9
	MA5-12557 was used in immunohistochemistry to study the role of Ki-67, p53, estrogen and progesterone receptors in uterine leiomyosarcomas
Human / 1:100	Gynecologic oncology (Oct 2005; 99: 36) **"The expression of Ki-67, p53, estrogen and progesterone receptors affecting survival in uterine leiomyosarcomas. A clinicopathologic study."** Author(s):Akhan SE,Yavuz E,Tecer A,Iyibozkurt CA,Topuz S,Tuzlali S,Bengisu E,Berkman S PubMed Article URL:http://dx.doi.org/10.1016/j.ygyno.2005.05.019
	MA5-12557 was used in immunohistochemistry to investigate the relationship of p53 expression with DNA aneuploidy in vulva malignancies
Human / 1:1000	Human pathology (Oct 2010; 41: 1475) **"High levels of p53 expression correlate with DNA aneuploidy in (pre)malignancies of the vulva."** Author(s):van der Avoort IA,van de Nieuwenhof HP,Otte-Höller I,Nirmala E,Bulten J,Massuger LF,van der Laak JA, Slootweg PJ,de Hullu JA,van Kempen LC PubMed Article URL:http://dx.doi.org/10.1016/j.humpath.2009.12.015
	MA5-12557 was used in immunohistochemistry to study p53, PCNA and Ki-67 as outcome predictors in the treatment of laryngeal cancer
Human / 1:50	Journal of medicine and life (Apr 2010; 2: 219) **"The role of p53, PCNA and Ki-67 as outcome predictors in the treatment of laryngeal cancer."** Author(s):Sarafoleanu D,Postelnicu V,Iosif C,Manea C,Sarafoleanu C PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/20108544
	MA5-12557 was used in immunohistochemistry to perform immunohistochemical studies of apocrine carcinomas in Turkish women with breast cancer
Human / Not Cited	Pathology, research and practice (Aug 2008; 204: 367) **"Apocrine carcinomas of the breast in Turkish women: hormone receptors, c-erbB-2 and p53 immunoexpression."** Author(s):Kaya H,Bozkurt SU,Erbarut I,Djamgoz MB PubMed Article URL:http://dx.doi.org/10.1016/j.prp.2008.01.012
	MA5-12557 was used in immunohistochemistry to report on a case of myointimoma of the glans penis
Human / Not Cited	Pathology international (Mar 2007; 57: 158) **"Myointimoma of the glans penis."** Author(s):Vardar E,Gunlusoy B,Arslan M,Kececi S PubMed Article URL:http://dx.doi.org/10.1111/j.1440-1827.2006.02074.x

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in immunohistochemistry to discuss recurrent intracranial hemangiopericytoma with multiple metastases
Not Applicable / 1:50	Chinese medical journal (Jan 2006; 119: 169) **"Recurrent intracranial hemangiopericytoma with multiple metastases."** Author(s):Cao Y,Zhang MZ,Wang JM,Zhang W,Li G,Zhao JZ PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/16455002
Human / 1:100	MA5-12557 was used in immunohistochemistry to report on a case of paratesticular clear cell carcinoma of the tunica vaginalis of the testis
	Pathology international (Aug 2004; 54: 641) **"Clear cell adenocarcinoma of the tunica vaginalis of the testis with an adjacent uterus-like tissue."** Author(s):Tulunay O,Gögü C,Baltaci S,Bulut S PubMed Article URL:http://dx.doi.org/10.1111/j.1440-1827.2004.01675.x
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study the binding of Twist-1 to p53 and the role of the interaction in promoting p53 degradation
	Cancer cell (Sep 2012; 22: 404) **"A "twist box" code of p53 inactivation: twist box: p53 interaction promotes p53 degradation."** Author(s):Piccinin S,Tonin E,Sessa S,Demontis S,Rossi S,Pecciarini L,Zanatta L,Pivetta F,Grizzo A,Sonego M,Rosano C,Dei Tos AP,Doglioni C,Maestro R PubMed Article URL:http://dx.doi.org/10.1016/j.ccr.2012.08.003
Human / 1:50	MA5-12557 was used in immunohistochemistry to study the prognostic significance of the expression of cyclin B1, p34cdc2, p27(Kip1) and p53 in gastric cancer
	Yonsei medical journal (Aug 2007; 48: 694) **"Prognostic implications of cyclin B1, p34cdc2, p27(Kip1) and p53 expression in gastric cancer."** Author(s):Kim DH PubMed Article URL:http://dx.doi.org/10.3349/ymj.2007.48.4.694
Human / 1:150	MA5-12557 was used in immunohistochemistry to study the role of HPV in the progression of epithelial dysplasia to oral cancer
	Anticancer research (Sep 2010; 30: 3435) **"Frequency and role of HPV in the progression of epithelial dysplasia to oral cancer."** Author(s):Angiero F,Gatta LB,Seramondi R,Berenzi A,Benetti A,Magistro S,Ordesi P,Grigolato P,Dessy E PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/20944119
Human / 1:1000	MA512557 was used in immunohistochemistry to perform morphological, p53 immunohistochemical, and TP53 gene mutational analyses of pelvic carcinosarcomas
	Virchows Archiv : an international journal of pathology (Jul 2016; 469: 61) **"Identical TP53 mutations in pelvic carcinosarcomas and associated serous tubal intraepithelial carcinomas provide evidence of their clonal relationship."** Author(s):Ardighieri L,Mori L,Conzadori S,Bugatti M,Falchetti M,Donzelli CM,Ravaggi A,Odicino FE,Facchetti F PubMed Article URL:http://dx.doi.org/10.1007/s00428-016-1933-x
Human / 1:100	MA5-12557 was used in immunohistochemistry to investigate the expression of specific genes in resected adenocarcinoma of lung
	Cancer (Feb 2010; 116: 676) **"Clinical impact of phosphorylated signal transducer and activator of transcription 3, epidermal growth factor receptor, p53, and vascular endothelial growth factor receptor 1 expression in resected adenocarcinoma of lung by using tissue microarray."** Author(s):Kim HS,Park YH,Lee J,Ahn JS,Kim J,Shim YM,Kim JH,Park K,Han J,Ahn MJ PubMed Article URL:http://dx.doi.org/10.1002/cncr.24748
Human / 1:100	MA5-12557 was used in immunohistochemistry to investigate the correlation of p53 and Ki-67 with the recurrence and progression of superficial urothelial cell carcinomas of urinary bladder
	Pathology international (Jul 2002; 52: 463) **"Impact of p53 and Ki-67 in predicting recurrence and progression of superficial (pTa and pT1) urothelial cell carcinomas of urinary bladder."** Author(s):Kilicli-Camur N,Kilicaslan I,Gulluoglu MG,Esen T,Uysal V PubMed Article URL:http://dx.doi.org/10.1046/j.1440-1827.2002.01371.x

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in immunohistochemistry to study the potential role of FUBP1 as tumor suppressor in oligodendrogliomas
Human / 1:500	Neuropathology and applied neurobiology (Feb 2014; 40: 205) **"Loss of FUBP1 expression in gliomas predicts FUBP1 mutation and is associated with oligodendroglial differentiation, IDH1 mutation and 1p/19q loss of heterozygosity."** Author(s):Baumgarten P,Harter PN,Tönjes M,Capper D,Blank AE,Sahm F,von Deimling A,Kolluru V,Schwamb B, Rabenhorst U,Starzetz T,Kögel D,Rieker RJ,Plate KH,Ohgaki H,Radlwimmer B,Zörnig M,Mittelbronn M PubMed Article URL:http://dx.doi.org/10.1111/nan.12088
	MA5-12557 was used in immunohistochemistry to investigate the relation between endometrial intraepithelial carcinoma and serous ovarian carcinoma
Human / 1:250	International journal of gynecological cancer : official journal of the International Gynecological Cancer Society (Mar 2012; 22: 457) **"Concurrent endometrial intraepithelial carcinoma (EIC) and serous ovarian cancer: can EIC be seen as the precursor lesion?"** Author(s):Roelofsen T,van Kempen LC,van der Laak JA,van Ham MA,Bulten J,Massuger LF PubMed Article URL:http://dx.doi.org/10.1097/IGC.0b013e3182434a81
	MA5-12557 was used in immunohistochemistry to study the correlation of GABA-A subunit expression with tumor histology and clinical outcome in human glioma
Human / 1:2000	PloS one (Jan 2013; 7:) **"GABA-A channel subunit expression in human glioma correlates with tumor histology and clinical outcome."** Author(s):Smits A,Jin Z,Elsir T,Pedder H,Nistér M,Alafuzoff I,Dimberg A,Edqvist PH,Pontén F,Aronica E,Birnir B PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0037041
	MA5-12557 was used in immunohistochemistry to study the benefits and risks of preoperative neoadjuvant chemoradiotherapy in patients suffering squamous cell carcinoma of the thoracic esophagus
Human / 1:200	Hepato-gastroenterology (Jan 2012; 58: 1214) **"Efficacy and drawbacks of neoadjuvant chemoradiotherapy in squamous cell carcinoma of the thoracic esophagus."** Author(s):Wolfárd A,Paszt A,Szentpáli K,Hideghéthy K,Uhercsák G,Németh I,Tiszlavicz L,Lázár G PubMed Article URL:http://dx.doi.org/10.5754/hge09500
	MA5-12557 was used in immunohistochemistry to report on a case of breast carcinoma metastases in paranasal sinuses
Human / 1:200	Acta otorhinolaryngologica Italica : organo ufficiale della Societa italiana di otorinolaringologia e chirurgia cervico-facciale (Apr 2004; 24: 87) **"Breast carcinoma metastases in paranasal sinuses, a rare occurrence mimicking a primary nasal malignancy. case report."** Author(s):Marchioni D,Monzani D,Rossi G,Rivasi F,Presutti L PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/15468998
	MA5-12557 was used in immunohistochemistry to investigate esophageal function and its relationship with gastroesophageal reflux disease and Barrett esophagus in patients with cervical inlet patch
Human / Not Cited	Diseases of the esophagus : official journal of the International Society for Diseases of the Esophagus (Aug 2012; 25: 498) **"Detailed esophageal function and morphological analysis shows high prevalence of gastroesophageal reflux disease and Barrett's esophagus in patients with cervical inlet patch."** Author(s):Rosztóczy A,Izbéki F,Németh IB,Dulic S,Vadászi K,Róka R,Gecse K,Gyökeres T,Lázár G,Tiszlavicz L,Wittmann T PubMed Article URL:http://dx.doi.org/10.1111/j.1442-2050.2011.01281.x
	MA5-12557 was used in immunohistochemistry to study p53 and a number of other potential markers at the genetic and immunohistochemical levels in ovarian high grade adenocarcinoma patients
Human / 1:1000	Pathology international (May 2013; 63: 252) **"Genetic alteration and immunohistochemical staining patterns of ovarian high-grade serous adenocarcinoma with special emphasis on p53 immnnostaining pattern."** Author(s):Lee SH,Kim H,Kim WY,Han HS,Lim SD,Kim WS,Kim S,Hwang TS PubMed Article URL:http://dx.doi.org/10.1111/pin.12060
	MA5-12557 was used in immunohistochemistry to study a case of primary squamous cell carcinoma of the thyroid
Human / 1:1500	Pathology international (Jan 2012; 62: 43) **"Primary pure squamous cell carcinoma of the thyroid: report and histogenic consideration of a case involving a BRAF mutation."** Author(s):Ko YS,Hwang TS,Han HS,Lim SD,Kim WS,Oh SY PubMed Article URL:http://dx.doi.org/10.1111/j.1440-1827.2011.02745.x

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in immunohistochemistry to study the diagnostic and prognostic value of cell cycle regulators in differentiated thyroid cancer
Human / 1:200	Annals of surgical oncology (Dec 2007; 14: 3403) **"Cell cycle regulators show diagnostic and prognostic utility for differentiated thyroid cancer."** Author(s):Melck A,Masoudi H,Griffith OL,Rajput A,Wilkins G,Bugis S,Jones SJ,Wiseman SM PubMed Article URL:http://dx.doi.org/10.1245/s10434-007-9572-8
	MA5-12557 was used in immunohistochemistry to characterize the cancerous features of acquired melanocytic nevi following repeated exposure to UVA or UVB irradiation
Human / Not Cited	Experimental dermatology (Feb 2012; 21: 86) **"Dermoscopic, histological and immunohistochemical evaluation of cancerous features in acquired melanocytic nevi that have been repeatedly exposed to UVA or UVB."** Author(s):Manganoni AM,Rossi MT,Sala R,Venturini M,Sereni E,Ungari M,Marocolo D,Lonardi S,Calzavara-Pinton P PubMed Article URL:http://dx.doi.org/10.1111/j.1600-0625.2011.01397.x
	MA5-12557 was used in immunohistochemistry to report on a case of transitional cell carcinoma of the endometrium associated with benign ovarian brenner tumor
Human / 1:25	International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists (Jul 2007; 26: 298) **"Transitional cell carcinoma of the endometrium associated with benign ovarian brenner tumor: a case report with immunohistochemistry molecular analysis and a review of the literature."** Author(s):Giordano G,D'Adda T,Gnetti L,Merisio C,Raboni S PubMed Article URL:http://dx.doi.org/10.1097/01.pgp.0000236943.28969.b2
	MA5-12557 was used in immunohistochemistry to study p27 and p53 expression in endometrial carcinoma compared to complex hyperplasia with atypia
Human / 1 µg/mL	Pathology oncology research : POR (Dec 2004; 10: 89) **"Significantly decreased P27 expression in endometrial carcinoma compared to complex hyperplasia with atypia (correlation with p53 expression)."** Author(s):Ozkara SK,Corakci A PubMed Article URL:http://dx.doi.org/10.1007/BF02893462
	MA5-12557 was used in immunohistochemistry to investigate the gene events of p16INK4a and p14ARF in oral proliferative verrucous leukoplakia and their correlation with disease progression and prognosis
Human / Not Cited	Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology (Nov 2008; 17: 3179) **"Frequent alterations of p16INK4a and p14ARF in oral proliferative verrucous leukoplakia."** Author(s):Kresty LA,Mallery SR,Knobloch TJ,Li J,Lloyd M,Casto BC,Weghorst CM PubMed Article URL:http://dx.doi.org/10.1158/1055-9965.EPI-08-0574
	MA5-12557 was used in immunohistochemistry to study the effect of artificial food colors and additives on laryngeal histomorphology and immunohistochemical expression in maternally exposed rats.
Rat / 1:100	Journal of environmental pathology, toxicology and oncology : official organ of the International Society for Environmental Toxicology and Cancer (Aug 2014; 33: 123) **"Effects of maternally exposed food coloring additives on laryngeal histology in rats."** Author(s):Baak K,Doguç DK,Aylak F,Karadayi N,Gültekin F PubMed Article URL:http://dx.doi.org/10.1615/jenvironpatholtoxicoloncol.2014008723
	MA5-12557 was used in immunohistochemistry to study the expression of mapsin in invasive ductal carcinoma of the breast and the correlation with clinicopathological features
Human / 1:50	Journal of Korean medical science (Apr 2006; 21: 309) **"Clinicopathological significance of maspin expression in breast cancer."** Author(s):Lee MJ,Suh CH,Li ZH PubMed Article URL:http://dx.doi.org/10.3346/jkms.2006.21.2.309
	MA5-12557 was used in immunohistochemistry to establish criteria for the recognition of serrated pathway adenocarcinomas
Human / Not Cited	PloS one (Aug 2013; 8:) **"Serrated pathway adenocarcinomas: molecular and immunohistochemical insights into their recognition."** Author(s):Gurzu S,Szentirmay Z,Toth E,Bara T,Bara T,Jung I PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0057699
	MA5-12557 was used in immunohistochemistry to study the expression of p53 and bcl-2 in glioblastomas
Human / 1:50	Romanian journal of morphology and embryology = Revue roumaine de morphologie et embryologie (Jul 2006; 46: 275) **"p53 protein and bcl-2 expression in glioblastomas. Pathological correlations in a comprehensive series."** Author(s):Ardeleanu C,Ceauu M,Butur G,Grmad ZF,Dnil L,Hllu F,Arsene D PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/16688362

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in immunohistochemistry to investigate the expression of mammalian actin regulatory protein Ena in colorectal lesions
Human / Not Cited	Romanian journal of morphology and embryology = Revue roumaine de morphologie et embryologie (Dec 2008; 49: 345) **"The expression of cytoskeleton regulatory protein Mena in colorectal lesions."** Author(s):Gurzu S,Jung I,Prantner I,Ember I,Pávai Z,Mezei T PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/18758639
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study the prognostic value of immunohistochemical and FISH analysis of BCL2, BCL6, IGH, TP53, and MYC in Turkish patients with diffuse large B-cell lymphoma
	Cancer genetics (Mar 2014; 207: 87) **"BCL2, BCL6, IGH, TP53, and MYC protein expression and gene rearrangements as prognostic markers in diffuse large B-cell lymphoma: a study of 44 Turkish patients."** Author(s):Akay OM,Aras BD,Isiksoy S,Toprak C,Mutlu FS,Artan S,Oner U,Gulbas Z PubMed Article URL:http://dx.doi.org/10.1016/j.cancergen.2014.02.001
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study the differences in oral cytology between smokers and non-smokers
	Oral oncology (Dec 2003; 39: 842) **"Oral cytology assessment by flow cytometry of DNA adducts, aneuploidy, proliferation and apoptosis shows differences between smokers and non-smokers."** Author(s):Schwartz JL,Muscat JE,Baker V,Larios E,Stephenson GD,Guo W,Xie T,Gu X,Chung FL PubMed Article URL:http://dx.doi.org/10.1016/s1368-8375(03)00107-6
Human / 2 µg/mL	MA5-12557 was used in immunohistochemistry to investigate the presence and utility of p53 antibodies in patients with breast cancer
	Breast cancer research and treatment (Sep 2005; 93: 111) **"The presence of serum anti-p53 antibodies from patients with invasive ductal carcinoma of breast: correlation to other clinical and biological parameters."** Author(s):Gao RJ,Bao HZ,Yang Q,Cong Q,Song JN,Wang L PubMed Article URL:http://dx.doi.org/10.1007/s10549-005-4321-9
Human / 1:50	MA5-12557 was used in immunohistochemistry to study the role of CD26 in modulating chemokine signals, thrombospondin-1 expression, and T cell motility
	Journal of immunology (Baltimore, Md. : 1950) (Sep 2009; 183: 3616) **"A CD26-controlled cell surface cascade for regulation of T cell motility and chemokine signals."** Author(s):Liu Z,Christensson M,Forslöw A,De Meester I,Sundqvist KG PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.0804336
Human / 1:50	MA5-12557 was used in immunohistochemistry to compare the CD31 and CD105 endothelial areas in colorectal carcinomas by computer-assisted morphometrical analysis
	Romanian journal of morphology and embryology = Revue roumaine de morphologie et embryologie (Sep 2009; 50: 239) **"The differences between the endothelial area marked with CD31 and CD105 in colorectal carcinomas by computer-assisted morphometrical analysis."** Author(s):Jung I,Gurzu S,Raica M,Cîmpean AM,Szentirmay Z PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/19434317
Human / 1:100	MA5-12557 was used in immunohistochemistry The report on a patient with pulmonary large cell carcinoma with rhabdoid phenotype
	Annals of diagnostic pathology (Aug 2005; 9: 223) **"Pulmonary large cell carcinoma with rhabdoid phenotype."** Author(s):Yilmazbayhan D,Ates LE,Dilege S,Gulluoglu M,Tanju S,Kalayci G PubMed Article URL:http://dx.doi.org/10.1016/j.anndiagpath.2005.04.011
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study the expression of biomarkers in diagnostic biopsies and the corresponding resected tumors in non-small cell lung cancer
	Lung cancer (Amsterdam, Netherlands) (Jun 2004; 44: 295) **"Correlation of different markers (p53, EGF-R, c-erbB-2, Ki-67) expression in the diagnostic biopsies and the corresponding resected tumors in non-small cell lung cancer."** Author(s):Meert AP,Martin B,Verdebout JM,Paesmans M,Berghmans T,Ninane V,Sculier JP PubMed Article URL:http://dx.doi.org/10.1016/j.lungcan.2003.12.009
Rat / 1:100	MA5-12557 was used in immunohistochemistry to study the mechanism by which resveratrol attenuates doxorubicin-induced cellular damage
	Experimental and toxicologic pathology : official journal of the Gesellschaft fur Toxikologische Pathologie (Jul 2012; 64: 471) **"Resveratrol attenuates doxorubicin-induced cellular damage by modulating nitric oxide and apoptosis."** Author(s):Oktem G,Uysal A,Oral O,Sezer ED,Olukman M,Erol A,Akgur SA,Bilir A PubMed Article URL:http://dx.doi.org/10.1016/j.etp.2010.11.001

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in immunohistochemistry to study 3 cases of uterine adenomyosis/adenomyotic cysts of the cervical stump leading to serous carcinoma
Not Applicable / 1:600	Diagnostic pathology (Jun 2016; 11:) **"Serous carcinoma arising from uterine adenomyosis/adenomyotic cyst of the cervical stump: a report of 3 cases."** Author(s):Lu B,Chen Q,Zhang X,Cheng L PubMed Article URL:http://dx.doi.org/10.1186/s13000-016-0496-0
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study the expression of caspase-3, p53 and Bcl-2 in generalized aggressive periodontitis
	Head & face medicine (Jun 2006; 2:) **"Expression of caspase-3, p53 and Bcl-2 in generalized aggressive periodontitis."** Author(s):Bulut S,Uslu H,Ozdemir BH,Bulut OE PubMed Article URL:http://dx.doi.org/10.1186/1746-160X-2-17
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study the prognostic value of p53, p27, and alpha-catenin in superficial bladder carcinoma
	European urology (Jul 2006; 50: 76) **"The predictive value of p53, p27(kip1), and alpha-catenin for progression in superficial bladder carcinoma."** Author(s):Schrier BP,Vriesema JL,Witjes JA,Kiemeney LA,Schalken JA PubMed Article URL:http://dx.doi.org/10.1016/j.eururo.2005.12.041
Human / 1:120	MA5-12557 was used in immunohistochemistry to study the distribution of p53 mutations in Bowen's disease in Koreans
	Cancer letters (Sep 2000; 158: 27) **"p53 gene mutations in Bowen's disease in Koreans: clustering in exon 5 and multiple mutations."** Author(s):Lee HJ,Kim JS,Ha SJ,Roh KY,Seo EJ,Park WS,Lee JY,Park KS,Kim JW PubMed Article URL:http://dx.doi.org/10.1016/s0304-3835(00)00493-6
Human / 1:2000	MA5-12557 was used in immunohistochemistry to study the role of Dickkopf-1 in neuronal degeneration in Alzheimer's brain
	The Journal of neuroscience : the official journal of the Society for Neuroscience (Jun 2004; 24: 6021) **"Induction of Dickkopf-1, a negative modulator of the Wnt pathway, is associated with neuronal degeneration in Alzheimer's brain."** Author(s):Caricasole A,Copani A,Caraci F,Aronica E,Rozemuller AJ,Caruso A,Storto M,Gaviraghi G,Terstappen GC, Nicoletti F PubMed Article URL:http://dx.doi.org/10.1523/JNEUROSCI.1381-04.2004
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study potential prognostic markers in Hungarian breast cancer patients
	Anticancer research (Mar 2007; 27: 279) **"Prognostic factors in Hungarian breast cancer patients."** Author(s):Nádasi E,Anga B,Sándor J,Megyesi J,Kelemen D,Mottolese M,Natali PG,Hegedus G,Arany I,Ember I PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/17352244
Human / 1:150	MA5-12557 was used in immunohistochemistry to study the immunohistochemical expression of p53 and p21 in oral lichen planus and oral mucositis
	Archives of oral biology (Jun 2010; 55: 454) **"Oral lichen planus shows higher expressions of tumor suppressor gene products of p53 and p21 compared to oral mucositis. An immunohistochemical study."** Author(s):Safadi RA,Al Jaber SZ,Hammad HM,Hamasha AA PubMed Article URL:http://dx.doi.org/10.1016/j.archoralbio.2010.03.019
Human / 1:100	MA5-12557 was used in immunohistochemistry to evaluate the risk of carcinogenesis in inflammatory bowel disease by measuring microvessel density and the expression of p53, VEGF and cyclin-D1
	Digestive diseases and sciences (Sep 2009; 54: 1979) **"Expression of p53, VEGF, microvessel density, and cyclin-D1 in noncancerous tissue of inflammatory bowel disease."** Author(s):Alkim C,Savas B,Ensari A,Alkim H,Dagli U,Parlak E,Ulker A,Sahin B PubMed Article URL:http://dx.doi.org/10.1007/s10620-008-0554-x
Human / 1:2000	MA5-12557 was used in Immunohistochemistry to investigate familial adenomatous polyposis associated gastric pyloric gland adenomas, producing insight into its genetics and morphology.
	Histopathology (Mar 2017; 70: 549) **"Morphology and genetics of pyloric gland adenomas in familial adenomatous polyposis."** Author(s):Hackeng WM,Montgomery EA,Giardiello FM,Singhi AD,Debeljak M,Eshleman JR,Vieth M,Offerhaus GJ,Wood LD,Brosens LA PubMed Article URL:http://dx.doi.org/10.1111/his.13105

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in immunohistochemistry to study the prognostic role of TP53 mutation in medulloblastoma and its role in tumorigenesis
Human / 1:50	Journal of clinical oncology : official journal of the American Society of Clinical Oncology (Dec 2010; 28: 5188) **"TP53 mutation is frequently associated with CTNNB1 mutation or MYCN amplification and is compatible with long-term survival in medulloblastoma."** Author(s):Pfaff E,Remke M,Sturm D,Benner A,Witt H,Milde T,von Bueren AO,Wittmann A,Schöttler A,Jorch N,Graf N, Kulozik AE,Witt O,Scheurlen W,von Deimling A,Rutkowski S,Taylor MD,Tabori U,Lichter P,Korshunov A,Pfister SM PubMed Article URL:http://dx.doi.org/10.1200/JCO.2010.31.1670
	MA5-12557 was used in immunohistochemistry to investigate the prognostic significance of p21waf1/cip1 expression in oral squamous cell carcinoma
Human / Not Cited	Journal of oral pathology & medicine : official publication of the International Association of Oral Pathologists and the American Academy of Oral Pathology (May 2005; 34: 274) **"p21WAF1/CIP1 expression is a marker of poor prognosis in oral squamous cell carcinoma."** Author(s):Nemes JA,Nemes Z,Márton IJ PubMed Article URL:http://dx.doi.org/10.1111/j.1600-0714.2005.00310.x
	MA5-12557 was used in immunohistochemistry to study p53 expression and transcriptional activity in normal mucosa and tumor cells from patients suffering head and neck cancer
Human / 1:300	Head & neck (Nov 2012; 34: 1542) **"Assessment of p53 functional activity in tumor cells and histologically normal mucosa from patients with head and neck squamous cell carcinoma."** Author(s):Van der Vorst S,Dekairelle AF,Weynand B,Hamoir M,Gala JL PubMed Article URL:http://dx.doi.org/10.1002/hed.21960
	MA5-12557 was used in immunohistochemistry to study the expression of p63 and p53 in keratoacanthoma and intraepidermal and invasive neoplasms of the skin
Human / 1:200	Pathology, research and practice (Oct 2009; 205: 589) **"The expression of p63 and p53 in keratoacanthoma and intraepidermal and invasive neoplasms of the skin."** Author(s):Sakiz D,Turkmenoglu TT,Kabukcuoglu F PubMed Article URL:http://dx.doi.org/10.1016/j.prp.2009.01.010
	MA5-12557 was used in immunohistochemistry to study the expression of MLH1 and MSH2 in Turkish patients with sporadic colorectal cancer
Human / 1:100	World journal of gastroenterology (Sep 2007; 13: 4437) **"Importance of MutL homologue MLH1 and MutS homologue MSH2 expression in Turkish patients with sporadic colorectal cancer."** Author(s):Erdamar S,Ucaryilmaz E,Demir G,Karahasanoglu T,Dogusoy G,Dirican A,Goksel S PubMed Article URL:http://dx.doi.org/10.3748/wjg.v13.i33.4437
	MA5-12557 was used in immunohistochemistry to study the cytotoxic and genotoxic effects of orthodontic bonding adhesives upon human gingival papillae
Human / 1:100	Anticancer research (Oct 2009; 29: 3983) **"Evaluation of the cytotoxic and genotoxic effects of orthodontic bonding adhesives upon human gingival papillae through immunohistochemical expression of p53, p63 and p16."** Author(s):Angiero F,Farronato G,Dessy E,Magistro S,Seramondi R,Farronato D,Benedicenti S,Tetè S PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/19846940
	MA5-12557 was used in immunohistochemistry to examine the prognostic significance of multiple genes in osteosarcoma
Human / Not Cited	Acta orthopaedica et traumatologica turcica (May 2009; 43: 28) **"[The effect of resistance-related proteins on the prognosis and survival of patients with osteosarcoma: an immunohistochemical analysis]."** Author(s):Ozger H,Eralp L,Atalar AC,Toker B,Esberk Ate L,Sungur M,Bilgiç B,Ayan I PubMed Article URL:http://dx.doi.org/10.3944/AOTT.2009.028
	MA5-12557 was used in immunohistochemistry to study the role of survivin in pre-invasive lesions and non-small cell lung carcinoma
Human / Not Cited	Virchows Archiv : an international journal of pathology (Aug 2006; 449: 164) **"Survivin expression in pre-invasive lesions and non-small cell lung carcinoma."** Author(s):Akyürek N,Memi L,Ekinci O,Köktürk N,Oztürk C PubMed Article URL:http://dx.doi.org/10.1007/s00428-006-0239-9

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

Human / 1:30	MA5-12557 was used in immunohistochemistry to study the value of co-hypermethylation of p14 in combination with CADM1 and/or DCC in predicting esophageal squamous cell carcinoma recurrence Cancer (May 2013; 119: 1752) **"Cohypermethylation of p14 in combination with CADM1 or DCC as a recurrence-related prognostic indicator in stage I esophageal squamous cell carcinoma."** Author(s):Lee E,Lee BB,Ko E,Kim Y,Han J,Shim YM,Park J,Kim DH PubMed Article URL:http://dx.doi.org/10.1002/cncr.27948
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study the role of bax, fas, and p53 in the pathogenesis of early-stage mycosis fungoides and alterations in expression following photochemotherapy Indian journal of dermatology (Aug 2012; 56: 501) **"Implications of bax, fas, and p53 in the pathogenesis of early-stage mycosis fungoides and alterations in expression following photochemotherapy."** Author(s):Aydin F,Levent Y,Nilgun S,Pancar YE,Yasar TA PubMed Article URL:http://dx.doi.org/10.4103/0019-5154.87130
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study endometrial cancers and the relationship between ARID1A loss and the PI3kinase/Akt pathway, TP53 expression and microsatellite instability Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc (Nov 2013; 26: 1525) **"Loss of ARID1A expression and its relationship with PI3K-Akt pathway alterations, TP53 and microsatellite instability in endometrial cancer."** Author(s):Bosse T,ter Haar NT,Seeber LM,v Diest PJ,Hes FJ,Vasen HF,Nout RA,Creutzberg CL,Morreau H,Smit VT PubMed Article URL:http://dx.doi.org/10.1038/modpathol.2013.96
Human / 1:100	MA5-12557 was used in immunohistochemistry to study the value of RASSF1A and p63 alterations in predicting node-negative stage I-II non-small cell lung cancer recurrence-free survival Clinical cancer research : an official journal of the American Association for Cancer Research (Mar 2013; 19: 1204) **"Association of RASSF1A and p63 with poor recurrence-free survival in node-negative stage I-II non-small cell lung cancer."** Author(s):Ko E,Lee BB,Kim Y,Lee EJ,Cho EY,Han J,Shim YM,Park J,Kim DH PubMed Article URL:http://dx.doi.org/10.1158/1078-0432.CCR-12-2848
Human / 1:200	MA5-12557 was used in immunohistochemistry to investigate the beta-catenin pathway in non-melanoma skin tumors The American journal of pathology (Dec 2003; 163: 2277) **"Alterations of beta-catenin pathway in non-melanoma skin tumors: loss of alpha-ABC nuclear reactivity correlates with the presence of beta-catenin gene mutation."** Author(s):Doglioni C,Piccinin S,Demontis S,Cangi MG,Pecciarini L,Chiarelli C,Armellin M,Vukosavljevic T,Boiocchi M,Maestro R PubMed Article URL:http://dx.doi.org/10.1016/s0002-9440(10)63585-7
Human / 1:1000	MA5-12557 was used in immunohistochemistry to study the correlation between molecular changes seen in pre-operative samples and those seen in hysterectomy samples of patients with endometrial carcinoma Gynecologic oncology (May 2014; 133: 197) **"High concordance of molecular tumor alterations between pre-operative curettage and hysterectomy specimens in patients with endometrial carcinoma."** Author(s):Stelloo E,Nout RA,Naves LC,Ter Haar NT,Creutzberg CL,Smit VT,Bosse T PubMed Article URL:http://dx.doi.org/10.1016/j.ygyno.2014.02.012
Human / 1:100	MA5-12557 was used in immunohistochemistry to report on a case of papillary carcinoma with diffuse papillomatosis of the gallbladder and cystic duct Annals of diagnostic pathology (Apr 2011; 15: 140) **"Papillary carcinoma with diffuse papillomatosis of gallbladder and cystic duct."** Author(s):Kosemehmetoglu K,Akpinar E,Sokmensuer C,Hamaloglu E PubMed Article URL:http://dx.doi.org/10.1016/j.anndiagpath.2010.02.004
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study the prognostic value of M-CAM expression in epithelial ovarian cancer International journal of cancer (Oct 2006; 119: 1920) **"M-CAM expression as marker of poor prognosis in epithelial ovarian cancer."** Author(s):Aldovini D,Demichelis F,Doglioni C,Di Vizio D,Galligioni E,Brugnara S,Zeni B,Griso C,Pegoraro C,Zannoni M,Gariboldi M,Balladore E,Mezzanzanica D,Canevari S,Barbareschi M PubMed Article URL:http://dx.doi.org/10.1002/ijc.22082

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in immunohistochemistry to study the histopathology of colorectal carcinomas in MUTYH-associated polyposis and microsatellite unstable carcinomas
Human / 1:1000	BMC cancer (Jun 2009; 9:) **"Colorectal carcinomas in MUTYH-associated polyposis display histopathological similarities to microsatellite unstable carcinomas."** Author(s):Nielsen M,de Miranda NF,van Puijenbroek M,Jordanova ES,Middeldorp A,van Wezel T,van Eijk R,Tops CM, Vasen HF,Hes FJ,Morreau H PubMed Article URL:http://dx.doi.org/10.1186/1471-2407-9-184
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study alterations in K-ras, APC and p53 and their relationship with clinicopathology and survival in Indian patients with colorectal cancer
	Tumour biology : the journal of the International Society for Oncodevelopmental Biology and Medicine (Jun 2013; 34: 1901) **"Alterations in K-ras, APC and p53-multiple genetic pathway in colorectal cancer among Indians."** Author(s):Malhotra P,Anwar M,Nanda N,Kochhar R,Wig JD,Vaiphei K,Mahmood S PubMed Article URL:http://dx.doi.org/10.1007/s13277-013-0734-y
Human / 1:1000	MA5-12557 was used in immunohistochemistry to study the prognostic value of the predicted p53 function in patients with sporadic colon cancer
	BMC cancer (Jun 2013; 13:) **"Integral analysis of p53 and its value as prognostic factor in sporadic colon cancer."** Author(s):Sarasqueta AF,Forte G,Corver WE,de Miranda NF,Ruano D,van Eijk R,Oosting J,Tollenaar RA,van Wezel T, Morreau H PubMed Article URL:http://dx.doi.org/10.1186/1471-2407-13-277
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study p53 and Ki67 status and their relationship with bcl-2 expression and classical prognostic factors in colorectal carcinoma
	Romanian journal of morphology and embryology = Revue roumaine de morphologie et embryologie (Jan 2008; 48: 95) **"The correlation between the immunostains for p53 and Ki67 with bcl-2 expression and classical prognostic factors in colorectal carcinomas."** Author(s):Gurzu S,Jung J,Mezei T,Pávai Z PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/17641794
Human / Not Cited	MA5-12557 was used in immunohistochemistry to study the molecular biology of collision tumors of the gastroesophageal junction
	The American journal of surgical pathology (Nov 2004; 28: 1492) **"Do collision tumors of the gastroesophageal junction exist? A molecular analysis."** Author(s):Milne AN,Carvalho R,van Rees BP,van Lanschot JJ,Offerhaus GJ,Weterman MA PubMed Article URL:http://dx.doi.org/10.1097/01.pas.0000138184.74496.4d
Human / 1:500	MA5-12557 was used in immunohistochemistry to investigate the secretion of anti-diuretic hormone in neuroblastoma
	Endocrine pathology (Dec 2010; 21: 266) **"Primary sellar neuroblastoma presenting with syndrome of inappropriate secretion of anti-diuretic hormone."** Author(s):Radotra B,Apostolopoulos V,Sandison A,Hatfield EC,Mendoza N,Moss J,Mehta A,Glaser M,Meeran K,Roncaroli F PubMed Article URL:http://dx.doi.org/10.1007/s12022-010-9140-9
Human / 1:1000	MA5-12557 was used in immunohistochemistry to study if combined analysis of the main oncogenic pathways improves prognostic accuracy in endometrial cancer
	Gynecologic oncology (Sep 2012; 126: 466) **"Improved risk assessment of endometrial cancer by combined analysis of MSI, PI3K-AKT, Wnt/-catenin and P53 pathway activation."** Author(s):Nout RA,Bosse T,Creutzberg CL,Jürgenliemk-Schulz IM,Jobsen JJ,Lutgens LC,van der Steen-Banasik EM,van Eijk R,Ter Haar NT,Smit VT PubMed Article URL:http://dx.doi.org/10.1016/j.ygyno.2012.05.012
Human / 1:200	MA5-12557 was used in immunohistochemistry and western blot to study the prognostic value of UNC5H4 expression in non-small cell lung cancer
	Oncology letters (Nov 2013; 6: 1363) **"UNC5H4-induced apoptosis in non-small cell lung cancer is not dependent on p53 status only."** Author(s):Zhao ZH,Lin L,Liang A,Li HQ,Zhu Y PubMed Article URL:http://dx.doi.org/10.3892/ol.2013.1571

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in immunohistochemistry to study tumor heterogeneity and progression in early rectal cancer
Human / 1:1000	Clinical cancer research : an official journal of the American Association for Cancer Research (Feb 2008; 14: 772) **"Progression and tumor heterogeneity analysis in early rectal cancer."** Author(s):Lips EH,van Eijk R,de Graaf EJ,Doornebosch PG,de Miranda NF,Oosting J,Karsten T,Eilers PH,Tollenaar RA, van Wezel T,Morreau H PubMed Article URL:http://dx.doi.org/10.1158/1078-0432.CCR-07-2052
	MA5-12557 was used in immunohistochemistry to investigate the expression of some histopathological and immunohistochemical markers in sudden cardiac death
Human / 1:50	Romanian journal of morphology and embryology = Revue roumaine de morphologie et embryologie (Dec 2008; 49: 315) **"Immunophenotypical pleomorphism expression in sudden cardiac death."** Author(s):Ceauu M,Curc C,Ardeleanu C,Dermengiu D PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/18758635
	MA5-12557 was used in immunohistochemistry to perform a detailed analysis of the presence of lesions in the Müllerian ducts of patients with serous ovarian cancer
Human / 1:250	Modern pathology : an official journal of the United States and Canadian Academy of Pathology, Inc (Jul 2014; 27: 1002) **"Müllerian precursor lesions in serous ovarian cancer patients: using the SEE-Fim and SEE-End protocol."** Author(s):Mingels MJ,van Ham MA,de Kievit IM,Snijders MP,van Tilborg AA,Bulten J,Massuger LF PubMed Article URL:http://dx.doi.org/10.1038/modpathol.2013.212
	MA5-12557 was used in immunohistochemistry to study the expresson of p53 and Mdm2 in the skin of patients with vitiligo and the significance for non-melanoma skin cancer
Human / 1:50	Acta dermatovenerologica Croatica : ADC (Jun 2014; 21: 71) **"Vitiligo: is it grace or curse?"** Author(s):Bakry OA,Hammam MA,Abdel Wahed MM PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/24001413
	MA5-12557 was used in immunohistochemistry to report on a case of primary squamous carcinoma of the salpinx associated with serous carcinoma of the omentum
Human / 1:25	International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists (Nov 2010; 29: 533) **"A Unique case of primary squamous carcinoma of the salpinx associated with serous carcinoma of the omentum: a pathological and molecular study."** Author(s):Giordano G,D'Adda T,Brigati F,Lombardi M,Raboni S PubMed Article URL:http://dx.doi.org/10.1097/PGP.0b013e3181e8ae3d
	MA5-12557 was used in immunohistochemistry to study the association between p16, p53 and Ki-67 protein expression and progression of epithelial dysplasia of the oral cavity
Human / 1:150	Anticancer research (Dec 2008; 28: 2535) **"Expression of p16, p53 and Ki-67 proteins in the progression of epithelial dysplasia of the oral cavity."** Author(s):Angiero F,Berenzi A,Benetti A,Rossi E,Del Sordo R,Sidoni A,Stefani M,Dessy E PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/19035275
	MA5-12557 was used in immunohistochemistry to report on a case of cerebellar liponeurocytoma/lipidized medulloblastoma
Human / Not Cited	Journal of neuro-oncology (Jan 2005; 71: 53) **"Cerebellar liponeurocytoma/lipidized medulloblastoma."** Author(s):Aker FV,Ozkara S,Eren P,Peker O,Armaan S,Hakan T PubMed Article URL:http://dx.doi.org/10.1007/s11060-004-9172-4
	MA5-12557 was used in immunohistochemistry to examine the diagnostic significance of p53 protein in the tumorigenesis in biliopancreatic tree
Human / 1:50	Digestive diseases and sciences (Apr 2009; 54: 789) **"Immunocytochemical assessment of p53 protein to detect malignancy in increased cell-yield brush cytology from the biliopancreatic tree."** Author(s):Villanacci V,Cestari R,Giulini S,Cengia P,Missale G,Berenzi A,Rossi E,Bonardi M,Baiocchi L,Bassotti G PubMed Article URL:http://dx.doi.org/10.1007/s10620-008-0431-7
	MA5-12557 was used in immunohistochemistry to study the prognostic value of different PIK3CA gene mutations in breast cancer
Human / Not Cited	Clinical cancer research : an official journal of the American Association for Cancer Research (Oct 2007; 13: 6064) **"Different prognostic roles of mutations in the helical and kinase domains of the PIK3CA gene in breast carcinomas."** Author(s):Barbareschi M,Buttitta F,Felicioni L,Cotrupi S,Barassi F,Del Grammastro M,Ferro A,Dalla Palma P,Galligioni E, Marchetti A PubMed Article URL:http://dx.doi.org/10.1158/1078-0432.CCR-07-0266

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in immunohistochemistry to compare expression of Maspin, VEGF, and p53 between carcinomas
Human / 1:100	Pathology oncology research : POR (Dec 2010; 16: 553) **"Maspin, VEGF and p53 expression in small biopsies of primary advanced lung cancer and relationship with clinicopathologic parameters."** Author(s):Bircan A,Bircan S,Kapucuoglu N,Songur N,Ozturk O,Akkaya A PubMed Article URL:http://dx.doi.org/10.1007/s12253-010-9259-5
	MA5-12557 was used in immunohistochemistry to study the inhibitory effect of 5-FU and selenium on the growth of colorectal cancer cells and the role of caspases
Human / Not Cited	Anticancer research (Mar 2009; 28: 3579) **"Role of caspases in 5-FU and selenium-induced growth inhibition of colorectal cancer cells."** Author(s):Thant AA,Wu Y,Lee J,Mishra DK,Garcia H,Koeffler HP,Vadgama JV PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/19189638
	MA5-12557 was used in immunohistochemistry to investigate the efficacy of p53 therapy in Li-Fraumeni syndrome
Human / Not Cited	Molecular cancer therapeutics (May 2007; 6: 1478) **"p53 therapy in a patient with Li-Fraumeni syndrome."** Author(s):Senzer N,Nemunaitis J,Nemunaitis M,Lamont J,Gore M,Gabra H,Eeles R,Sodha N,Lynch FJ,Zumstein LA, Menander KB,Sobol RE,Chada S PubMed Article URL:http://dx.doi.org/10.1158/1535-7163.MCT-07-0125
	MA5-12557 was used in immunohistochemistry to study the role of fragile histidine triad protein in non-small cell lung cancer and its correlation with tumor proliferation
Human / Not Cited	The European respiratory journal (May 2003; 21: 753) **"Fragile histidine triad protein expression in nonsmall cell lung cancer and correlation with Ki-67 and with p53."** Author(s):Mascaux C,Martin B,Verdebout JM,Meert AP,Ninane V,Sculier JP PubMed Article URL:http://dx.doi.org/10.1183/09031936.03.00090202
	MA5-12557 was used in immunohistochemistry to study the molecular determinants of the response to radiotherapy in oral carcinoma
Human / Not Cited	International journal of cancer (May 2004; 109: 710) **"p53, p16 and cyclin D1: molecular determinants of radiotherapy treatment response in oral carcinoma."** Author(s):Jayasurya R,Francis G,Kannan S,Lekshminarayanan K,Nalinakumari KR,Abraham T,Abraham EK,Nair MK PubMed Article URL:http://dx.doi.org/10.1002/ijc.20042
	MA5-12557 was used in immunohistochemistry to report on four cases of chordoid glioma of the third ventricle
Human / 1:50	Neuropathology : official journal of the Japanese Society of Neuropathology (Apr 2013; 33: 134) **"Chordoid glioma of the third ventricle: four cases including one case with papillary features."** Author(s):Ni HC,Piao YS,Lu DH,Fu YJ,Ma XL,Zhang XJ PubMed Article URL:http://dx.doi.org/10.1111/j.1440-1789.2012.01333.x
	MA5-12557 was used in immunohistochemistry to study the value of glutamate synthetase expression as both a marker of epilepsy and a prognostic indicator in patients with glioblastoma multiforme
Human / 1:100	Neuro-oncology (May 2013; 15: 618) **"Glutamine synthetase expression as a valuable marker of epilepsy and longer survival in newly diagnosed glioblastoma multiforme."** Author(s):Rosati A,Poliani PL,Todeschini A,Cominelli M,Medicina D,Cenzato M,Simoncini EL,Magrini SM,Buglione M, Grisanti S,Padovani A PubMed Article URL:http://dx.doi.org/10.1093/neuonc/nos338
	MA5-12557 was used in immunohistochemistry to study the altered distribution of metaplastic cell types in atrophic gastritic mucosa with endocrine cell lesions
Human / 1:100	The Tohoku journal of experimental medicine (Jan 2004; 202: 13) **"Altered distribution of metaplastic Paneth, gastrin and pancreatic acinar cells in atrophic gastritic mucosa with endocrine cell lesions."** Author(s):Deveci MS,Deveci G PubMed Article URL:http://dx.doi.org/10.1620/tjem.202.13
	MA5-12557 was used in immunohistochemistry to study the diagnostic value of p53, bcl-2 and nm23 in serous ovarian tumors
Human / Not Cited	Turk patoloji dergisi (Jan 2011; 27: 38) **"P53, bcl-2, and nm23 expressions in serous ovarian tumors: correlation with the clinical and histopathological parameters."** Author(s):Arik D,Kulaçolu S PubMed Article URL:http://dx.doi.org/10.5146/tjpath.2010.01045

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA512557 was used in immunohistochemistry to describe the mechanism behind the association between single nucleotide polymorphism rs55705857 and glioma development.
Human / Not Cited	Scientific reports (Jun 2016; 6:) **"IDH-mutant glioma specific association of rs55705857 located at 8q24.21 involves MYC deregulation."** Author(s):Oktay Y,Ülgen E,Can Ö,Akyerli CB,Yüksel ,Erdemgil Y,Duras IM,Henegariu OI,Nanni EP,Selevsek N, Grossmann J,Erson-Omay EZ,Bai H,Gupta M,Lee W,Turcan ,Özpnar A,Huse JT,Sav MA,Flanagan A,Günel M,Sezerman OU,Yakcer MC,Pamir MN,Özduman K PubMed Article URL:http://dx.doi.org/10.1038/srep27569
	MA5-12557 was used in immunohistochemistry to report on a case of interdigitating dendritic cell tumor with breast and cervical lymph-node involvement
Human / Not Cited	Virchows Archiv : an international journal of pathology (May 2005; 446: 546) **"Interdigitating dendritic cell tumor with breast and cervical lymph-node involvement: a case report and review of the literature."** Author(s):Uluolu O,Akyürek N,Uner A,Cokun U,Ozdemir A,Gökçora N PubMed Article URL:http://dx.doi.org/10.1007/s00428-005-1209-3
	MA5-12557 was used in immunohistochemistry to report on a morphological and molecular analysis of two cases of Villoglandular adenocarcinoma of the cervix
Human / 1:50	International journal of gynecological pathology : official journal of the International Society of Gynecological Pathologists (Apr 2007; 26: 199) **"Villoglandular adenocarcinoma of the cervix: two new cases with morphological and molecular study."** Author(s):Giordano G,D'Adda T,Gnetti L,Merisio C,Gabrielli M,Melpignano M PubMed Article URL:http://dx.doi.org/10.1097/01.pgp.0000228141.01964.e7
	MA5-12557 was used in immunohistochemistry to study the utility of transient inhibition of hedgehog/smoothed signaling in vivo for selectively and efficiently induce tumor cell differentiation and apoptosis
Human / Not Cited	European journal of dermatology : EJD (Jul 2004; 14: 96) **"Induction of the differentiation and apoptosis of tumor cells in vivo with efficiency and selectivity."** Author(s):Tabs S,Avci O PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/15196999
	MA5-12557 was used in immunohistochemistry to investigate the association of Axin expression with non-small-cell lung cancer apoptosis induced by X-radiation
Human / 1:200	International journal of radiation oncology, biology, physics (Oct 2009; 75: 518) **"X-radiation induces non-small-cell lung cancer apoptosis by upregulation of Axin expression."** Author(s):Han Y,Wang Y,Xu HT,Yang LH,Wei Q,Liu Y,Zhang Y,Zhao Y,Dai SD,Miao Y,Yu JH,Zhang JY,Li G,Yuan XM, Wang EH PubMed Article URL:http://dx.doi.org/10.1016/j.ijrobp.2009.05.040

2 Immunoprecipitation References

Species / Dilution	Summary
	MA5-12557 was used in immunoprecipitation and western blot to study the modulation of p53 activity and oligimerization by the E3 ubiquitin ligase HERC2
Human / Not Cited	The Journal of biological chemistry (May 2014; 289: 14782) **"The E3 ubiquitin protein ligase HERC2 modulates the activity of tumor protein p53 by regulating its oligomerization."** Author(s):Cubillos-Rojas M,Amair-Pinedo F,Peiró-Jordán R,Bartrons R,Ventura F,Rosa JL PubMed Article URL:http://dx.doi.org/10.1074/jbc.M113.527978
	MA5-12557 was used in immunoprecipitation to study the role of the p53 target gene FLJ11259/DRAM encoding a novel transmembrane protein
Human / 2 µg/mL	Biochimica et biophysica acta (Apr 2007; 1769: 209) **"The direct p53 target gene, FLJ11259/DRAM, is a member of a novel family of transmembrane proteins."** Author(s):Kerley-Hamilton JS,Pike AM,Hutchinson JA,Freemantle SJ,Spinella MJ PubMed Article URL:http://dx.doi.org/10.1016/j.bbaexp.2007.02.002

4 Immunocytochemistry References

Species / Dilution	Summary
	MA5-12557 was used in immunocytochemistry and western blot to analyze the activity of p53 after stimulation with p53-dependent and -independent DNA damaging agents during human herpesvirus-infection
Not Applicable / 1:200	PloS one (Sep 2013; 8:) **"Inhibition of p53-dependent, but not p53-independent, cell death by U19 protein from human herpesvirus 6B."** Author(s):Kofod-Olsen E,Møller JM,Schleimann MH,Bundgaard B,Bak RO,Øster B,Mikkelsen JG,Hupp T,Höllsberg P PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0059223

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

Human / Not Cited	MA5-12557 was used in Immunocytochemistry to develop a novel network pharmacology approach based on multi-omics functional data integration to predict how stingray venom disrupts the physiological systems of target animals. Marine drugs (Dec 2021; 20:) **"Stingray Venom Proteins: Mechanisms of Action Revealed Using a Novel Network Pharmacology Approach."** Author(s):Kirchhoff KN,Billion A,Voolstra CR,Kremb S,Wilke T,Vilcinskas A PubMed Article URL:http://dx.doi.org/10.3390/md20010027
Mouse / 1:100	MA5-12557 was used in immunocytochemistry to derive and characterize a Wilms' tumour cell line International journal of cancer (Nov 2003; 107: 365) **"Derivation and characterization of a Wilms' tumour cell line, WiT 49."** Author(s):Alami J,Williams BR,Yeger H PubMed Article URL:http://dx.doi.org/10.1002/ijc.11429
Human / Not Cited	MA5-12557 was used in immunocytochemistry to study the mechanism by which apigenin induces apoptosis in human neuroblastoma cells Molecular cancer therapeutics (Jan 2005; 4: 1) **"Induction of caspase-dependent, p53-mediated apoptosis by apigenin in human neuroblastoma."** Author(s):Torkin R,Lavoie JF,Kaplan DR,Yeger H PubMed Article URL:http://www.ncbi.nlm.nih.gov/pubmed/15657348

1 Immunohistochemistry (Frozen) References

Species / Dilution	Summary
Human / Not Cited	MA5-12557 was used in Immunohistochemistry (Frozen) to lay the foundation for accurate prognostic and therapeutic stratification of SOC. Cancer cell (Feb 2020; 37: 226) **"The Repertoire of Serous Ovarian Cancer Non-genetic Heterogeneity Revealed by Single-Cell Sequencing of Normal Fallopian Tube Epithelial Cells."** Author(s):Hu Z,Artibani M,Alsaadi A,Wietek N,Morotti M,Shi T,Zhong Z,Santana Gonzalez L,El-Sahhar S,Carrami EM,Mallett G,Feng Y,Masuda K,Zheng Y,Chong K,Damato S,Dhar S,Campo L,Garruto Campanile R,Soleymani Majd H,Rai V,Maldonado-Perez D,Jones S,Cerundolo V,Sauka-Spengler T,Yau C,Ahmed AA PubMed Article URL:http://dx.doi.org/10.1016/j.ccell.2020.01.003

1 Flow Cytometry References

Species / Dilution	Summary
Human / Not Cited	MA5-12557 was used in Flow Cytometry to reveal that P1C1TM distinguishes between mutant and wild-type p53 expressing HLA-A24+ cells and mediates antibody dependent cellular cytotoxity of mutant p53 expressing cells in vitro. Nature communications (Nov 2019; 10:) **"Targeting mutant p53-expressing tumours with a T cell receptor-like antibody specific for a wild-type antigen."** Author(s):Low L,Goh A,Koh J,Lim S,Wang CI PubMed Article URL:http://dx.doi.org/10.1038/s41467-019-13305-z

5 Miscellaneous PubMed References

Species / Dilution	Summary
Human / 1:1000	MA5-12557 was used in western blot to study APC/C(Cdh1) function Nucleic acids research (Jun 2016; 44: 4745) **"New origin firing is inhibited by APC/CCdh1 activation in S-phase after severe replication stress."** Author(s):Ercilla A,Llopis A,Feu S,Aranda S,Ernfors P,Freire R,Agell N PubMed Article URL:http://dx.doi.org/10.1093/nar/gkw132
Human / 1:50	MA5-12557 was used in immunohistochemistry (paraffin) to test if Ki-67, proliferating cell nuclear antigen, silver-staining nucleolar organizer regions and p53 could differentiate spontaneous abortions from subtypes of gestational trophoblastic diseases. American journal of obstetrics and gynecology (Mar 2001; 184: 567) **"Expressions of proliferation markers (Ki-67, proliferating cell nuclear antigen, and silver-staining nucleolar organizer regions) and of p53 tumor protein in gestational trophoblastic disease."** Author(s):Kale A,Söylemez F,Ensari A PubMed Article URL:http://dx.doi.org/10.1067/mob.2001.111243
Human / Not Cited	MA5-12557 was used in immunohistochemistry to report and characterize two cases of accessory breast cancer occurring concurrently with primary invasive breast cancer. Cancer biology & medicine (Sep 2012; 9: 197) **"Accessory breast cancer occurring concurrently with bilateral primary invasive breast carcinomas: a report of two cases and literature review."** Author(s):Hao JY,Yang CC,Liu FF,Yang YL,Li S,Li WD,Li YQ,Lang RG,Fan Y,Paulos E,Zhang XM,Fu L PubMed Article URL:http://dx.doi.org/10.7497/j.issn.2095-3941.2012.03.008

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus

	MA5-12557 was used in immunohistochemistry - paraffin section to assess antibodies to use for the diagnosis of metastatic adenocarcinomas
Human / 1:100	Diagnostic cytopathology (Dec 2011; 39: 900) **"Cytological differential diagnosis among adenocarcinoma, epithelial mesothelioma, and reactive mesothelial cells in serous effusions by immunocytochemistry."** Author(s):Su XY,Li GD,Liu WP,Xie B,Jiang YH PubMed Article URL:http://dx.doi.org/10.1002/dc.21489
Human / Not Cited	MA5-12557 was used in immunohistochemistry (paraffin) to determine the roles of p53 and hMSH2 proteins in oral squamous cell carcinoma and oral dysplastic lesions.
	Oral oncology (Feb 2012; 48: 120) **"Immunoexpression of p53 and hMSH2 in oral squamous cell carcinoma and oral dysplastic lesions in Yemen: relationship to oral risk habits and prognostic factors."** Author(s):Helal Tel A,Fadel MT,El-Thobbani AK,El-Sarhi AM PubMed Article URL:http://dx.doi.org/10.1016/j.oraloncology.2011.08.024

5 Immunohistochemistry (Paraffin) References

Species / Dilution	Summary
	MA5-12557 was used in immunohistochemistry - paraffin section to study the expression of Ki-67, tumor protein P53, P21, and P27 in 8 paired WHO grade II astrocytoma samples
Not Applicable / Not Cited	Chinese journal of cancer (Mar 2012; 31: 159) **"Long-term molecular changes in WHO grade II astrocytomas following radiotherapy."** Author(s):Yue WY,Sai K,Wu QL,Xia YF,Yu SH,Chen ZP PubMed Article URL:http://dx.doi.org/10.5732/cjc.011.10149
	MA512557 was used in immunohistochemistry - paraffin section to evaluate the diagnostic value of stathmin expression in samples of vulvar intraepithelial neoplastic lesions
Human / 1:2000	Journal of clinical pathology (Dec 2016; 69: 1070) **"Stathmin is a highly sensitive and specific biomarker for vulvar high-grade squamous intraepithelial lesions."** Author(s):Nooij LS,Dreef EJ,Smit VT,van Poelgeest MI,Bosse T PubMed Article URL:http://dx.doi.org/10.1136/jclinpath-2016-203676
	MA5-12557 was used in immunohistochemistry - paraffin section find prognostic clusters for breast cancer
Human / Not Cited	BMC cancer (Aug 2016; 16:) **"p53, cathepsin D, Bcl-2 are joint prognostic indicators of breast cancer metastatic spreading."** Author(s):Guerra E,Cimadamore A,Simeone P,Vacca G,Lattanzio R,Botti G,Gatta V,D'Aurora M,Simionati B,Piantelli M,Alberti S PubMed Article URL:http://dx.doi.org/10.1186/s12885-016-2713-3
	MA5-12557 was used in immunohistochemistry - paraffin section to examine apoptosis and cell proliferation in synovial sarcoma
Not Applicable / Not Cited	European journal of cancer prevention : the official journal of the European Cancer Prevention Organisation (ECP) (Jun 2006; 15: 258) **"Extent, relationship and prognostic significance of apoptosis and cell proliferation in synovial sarcoma."** Author(s):Sun B,Sun Y,Wang J,Zhao X,Wang X,Hao X PubMed Article URL:http://dx.doi.org/10.1097/01.cej.0000198896.02185.68
	MA5-12557 was used in immunohistochemistry - paraffin section to identify diagnostic and prognostic markers for glioblastoma
Not Applicable / 1:30	International journal of oncology (Apr 2012; 40: 1122) **"Identification of prognostic biomarkers for glioblastomas using protein expression profiling."** Author(s):Jung Y,Joo KM,Seong DH,Choi YL,Kong DS,Kim Y,Kim MH,Jin J,Suh YL,Seol HJ,Shin CS,Lee JI,Kim JH,Song SY,Nam DH PubMed Article URL:http://dx.doi.org/10.3892/ijo.2011.1302

Thermo Fisher Scientific
3747 N. Meridian Road
Rockford, IL 61105 USA

thermofisher.com/contactus