

ErbB2 (HER-2) Recombinant Rabbit Monoclonal Antibody (SP3)

Product Details	
Size	500 µL
Species Reactivity	Human
Published Species	Human, Mouse
Host/Isotype	Rabbit / IgG
Expression system	proprietary
Class	Recombinant Monoclonal
Type	Antibody
Clone	SP3
Conjugate	Unconjugated
Immunogen	Recombinant protein encoding extracellular domain of human HER-2
Form	Liquid
Concentration	0.122 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.2, with 1% BSA
Contains	0.1% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_10980124

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	4 Publications
Immunohistochemistry (IHC)	-	75 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:100	12 Publications
Immunocytochemistry (ICC/IF)	1:250	3 Publications
ELISA (ELISA)	-	1 Publication

Product Specific Information

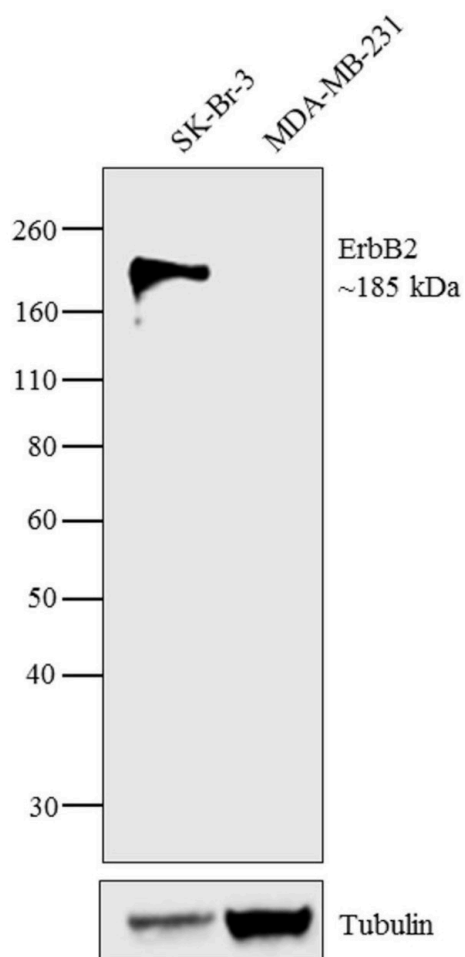
MA5-14509 targets HER-2 in IHC (P) applications and shows reactivity with Human samples.

The MA5-14509 immunogen is recombinant protein encoding extracellular domain of human HER-2.

Product Images For ErbB2 (HER-2) Recombinant Rabbit Monoclonal Antibody (SP3)

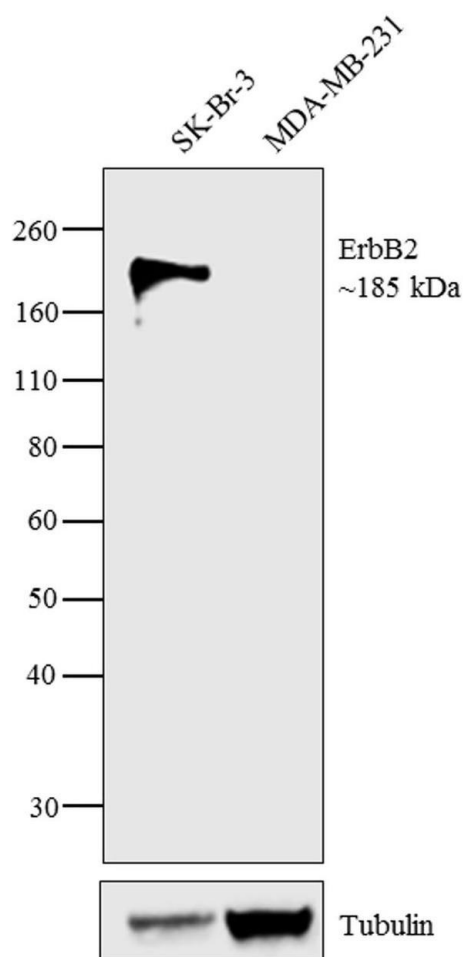
ErbB2 (HER-2) Antibody (MA5-14509)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell models owing to their inherent genetic constitution. Relative expression of ErbB2 was observed in SK-BR-3 and MDA-MB-231 in Western Blot using ErbB2 Monoclonal Antibody (Product # MA5-14509). SK-BR-3 has been reported to over-express ErbB2, whereas MDA-MB-231 has been shown to be negative for ErbB2 expression (PMCID: PMC2914277). {RE}



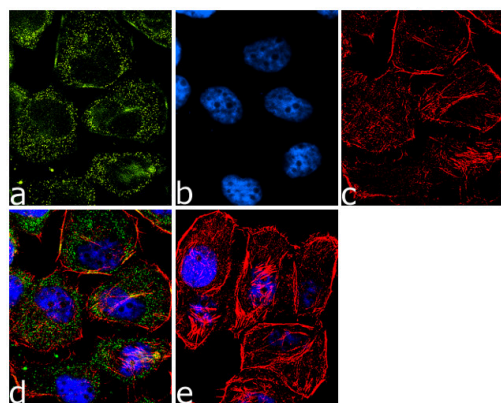
ErbB2 (HER-2) Antibody (MA5-14509) in WB

Western blot analysis was performed on membrane enriched extracts (30 µg lysate) of SK-BR-3 (1) and MDA-MB-231 (2). The blot was probed with Anti-ErbB2 Rabbit Monoclonal Antibody (Product #MA5-14509, 1: 1000 dilution) and detected by chemiluminescence using Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, HRP conjugate (Product # A27036, 0.25 µg/mL, 1:4000 dilution). A 185 kDa band corresponding to ErbB2 was observed in SK-BR-3 where as it was not observed in MDA-MB-231 which is an ErbB2 negative cell line. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with overnight wet transfer system. The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



ErbB2 (HER-2) Antibody (MA5-14509) in ICC/IF

Immunofluorescence analysis of ErbB2 was done on 70% confluent log phase T47D cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with ErbB2 (SP3) Rabbit Monoclonal Antibody (Product # MA5-14509) at 1:250 dilution in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d is a merged image showing cytoplasmic and membranous localization. Panel e is a no primary antibody control. The images were captured at 60X magnification.



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Western Blot (4)

<p>International journal of nanomedicine</p> <p>Strategy for Avoiding Protein Corona Inhibition of Targeted Drug Delivery by Linking Recombinant Affibody Scaffold to Magnetosomes.</p> <p>"MA5-14509 was used in Western Blot, ELISA to improve the targeting capability and drug delivery of NP in a simulated in vivo milieu."</p> <p>Authors: Ma S,Gu C,Xu J,He J,Li S,Zheng H,Pang B,Wen Y,Fang Q,Liu W,Tian J</p>	<p>Year 2022</p> <p>Species Human</p>
<p>Clinical epigenetics</p> <p>Hi-C profiling of cancer spheroids identifies 3D-growth-specific chromatin interactions in breast cancer endocrine resistance.</p> <p>"Published figure using ErbB2 (HER-2) recombinant monoclonal antibody (Product # MA5-14509) in Western Blot"</p> <p>Authors: Li J,Fang K,Choppavarapu L,Yang K,Yang Y,Wang J,Cao R,Jatoi I,Jin VX</p>	<p>Year 2021</p>

[View more WB references on thermofisher.com](#)

Immunohistochemistry (75)

<p>EJNMMI radiopharmacy and chemistry</p> <p>Dose predictions for [¹⁷⁷Lu]Lu-DOTA-panitumumab F(ab')₂ in NRG mice with HNSCC patient-derived tumour xenografts based on [⁶⁴Cu]Cu-DOTA-panitumumab F(ab')₂ - implications for a PET theranostic strategy.</p> <p>"Published figure using ErbB2 (HER-2) recombinant monoclonal antibody (Product # MA5-14509) in Immunohistochemistry"</p> <p>Authors: Ku A,Kondo M,Cai Z,Meens J,Li MR,Ailles L,Reilly RM</p>	<p>Year 2021</p> <p>Species Human</p>
<p>Translational oncology</p> <p>Therapy Resistance in Neoadjuvantly Treated Gastric Cancer and Cancer of the Gastroesophageal Junction is Associated with an Increased Expression of Immune Checkpoint Inhibitors-Comparison Against a Therapy Naïve Cohort.</p> <p>"MA5-14509 was used in Immunohistochemistry to characterize the expression of the checkpoint proteins V-domain Ig suppressor of T-cell activation (VISTA), programmed cell death 1 ligand 1 (PD-L1), and programmed cell death protein-1 (PD-1) in a cohort of GCs following platinum-based neoadjuvant chemotherapy."</p> <p>Authors: Schoop H,Bregenzner A,Halske C,Behrens HM,Krüger S,Egberts JH,Röcken C</p>	<p>Year 2020</p> <p>Species Human</p>

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More applications with references on thermofisher.com

IHC (P) (12)	ICC/IF (3)	ELISA (1)
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