10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-ERBB2 Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI1913

Specification

KD-Validated Anti-ERBB2 Mouse Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P04626
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG2a**
Calculated MW	**Predicted, 138 kDa, Observed, 180 kDa KDa**
Gene Name	**ERBB2**
Aliases	**ERBB2; Erb-B2 Receptor Tyrosine Kinase 2; HER2; NEU 2; C-ERB-2; C-ERB2; MLN-19; HER-2; CD340; NGL; V-Erb-B2 Avian Erythroblastic Leukemia Viral Oncogene Homolog 2; Tyrosine Kinase-Type Cell Surface Receptor HER2; Neuro/Glioblastoma Derived Oncogene Homolog; Human Epidermal Growth Factor Receptor 2; Receptor Tyrosine-Protein Kinase ErbB-2; Metastatic Lymph Node Gene 19 Protein; Proto-Oncogene C-ErbB-2; Proto-Oncogene Neu; P185(ErbB2); EC 2.7.10.1; MLN 19; V-Erb-B2 Avian Erythroblastic Leukemia Viral Oncogene Homolog 2 (Neuro/Glioblastoma Derived Oncogene Homolog) 2; V-Erb-B2 Erythroblastic Leukemia Viral Oncogene Homolog 2, Neuro/Glioblastoma Derived Oncogene Homolog; V-Erb-B2 Avian Erythroblastic Leukemia Viral Oncoprotein 2; Neuroblastoma/Glioblastoma Derived Oncogene Homolog; Metastatic Lymph Node Gene 19; C-Erb B2/Neu Protein; CD340 Antigen; P185(ERBB2); HER-2/Neu; Herstatin; P185erbB2; EC 2.7.10; VSCN2; MLN19; TKR1**
Immunogen	**Recombinant protein of human ERBB2**

KD-Validated Anti-ERBB2 Mouse Monoclonal Antibody - Additional Information

Gene ID	**2064**

Other Names
Receptor tyrosine-protein kinase erbB-2, 2.7.10.1, Metastatic lymph node gene 19 protein, MLN 19, Proto-oncogene Neu, Proto-oncogene c-ErbB-2, Tyrosine kinase-type cell surface receptor HER2, p185erbB2, CD340, ERBB2, HER2, MLN19, NEU, NGL

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KD-Validated Anti-ERBB2 Mouse Monoclonal Antibody - Protein Information

Name ERBB2

Synonyms HER2, MLN19, NEU, NGL

Function
Protein tyrosine kinase that is part of several cell surface receptor complexes, but that apparently needs a coreceptor for ligand binding. Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Regulates outgrowth and stabilization of peripheral microtubules (MTs). Upon ERBB2 activation, the MEMO1-RHOA-DIAPH1 signaling pathway elicits the phosphorylation and thus the inhibition of GSK3B at cell membrane. This prevents the phosphorylation of APC and CLASP2, allowing its association with the cell membrane. In turn, membrane-bound APC allows the localization of MACF1 to the cell membrane, which is required for microtubule capture and stabilization.

Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell projection, ruffle membrane; Single-pass type I membrane protein. Note=Internalized from the cell membrane in response to EGF stimulation. [Isoform 2]: Cytoplasm. Nucleus.

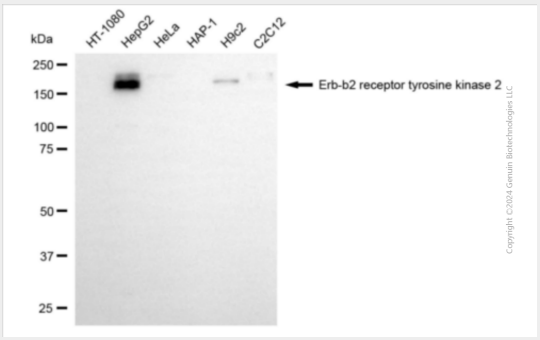
Tissue Location
Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth.

KD-Validated Anti-ERBB2 Mouse Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-ERBB2 Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-erb-b2 receptor tyrosine kinase 2 antibody (Cat#AGI1913).

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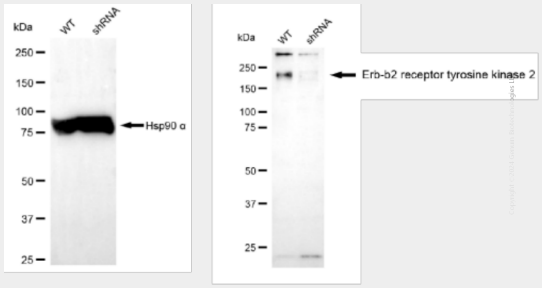
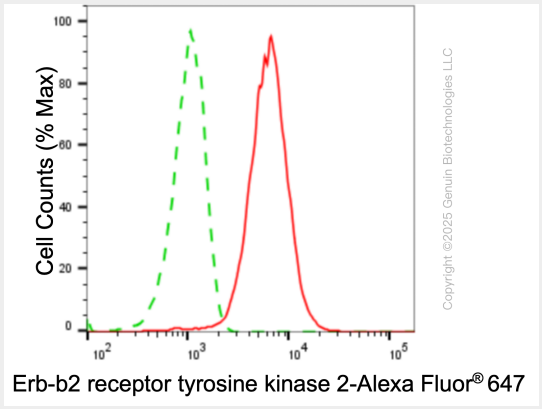
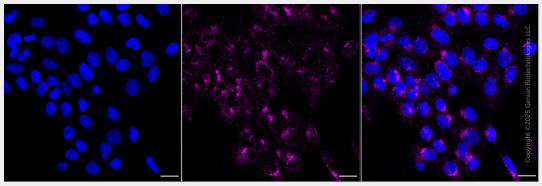
Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-erb-b2 receptor tyrosine kinase 2 antibody (Cat#AGI1913, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-erb-b2 receptor tyrosine kinase 2 antibody (Cat#AGI1913). Erb-b2 receptor tyrosine kinase 2 expression in wild type (WT) and erb-b2 receptor tyrosine kinase 2 (ERBB2) shRNA knockdown (KD) 293T cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-erb-b2 receptor tyrosine kinase 2 antibody (Cat#AGI1913, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Flow cytometric analysis of erb-b2 receptor tyrosine kinase 2 expression in HepG2 cells using anti-erb-b2 receptor tyrosine kinase 2 antibody (Cat#AGI1913, 1:2,000). Green, isotype control; red, erb-b2 receptor tyrosine kinase 2.



Immunocytochemical staining of HepG2 cells with anti-Erb-b2 receptor tyrosine kinase 2 antibody (Cat#AGI1913, 1:1,000). Nuclei were stained blue with DAPI; Erb-b2 receptor tyrosine kinase 2 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and Smart Gain□Low. Scale bar, 20 µm.