

#### KD-Validated Anti-ERBB2 Mouse Monoclonal Antibody Mouse monoclonal antibody Catalog # AGI1909

## Specification

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

WB, FC Application **Primary Accession** P04626 Reactivity Rat, Human, Mouse Clonality Monoclonal Isotype Mouse IgG2a Predicted, 138 kDa, Observed, 180 kDa Calculated MW **KD**a 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 **Ervthroblastic 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



# 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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

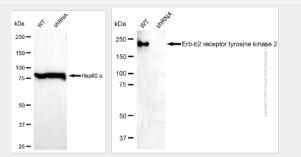
## KD-Validated Anti-ERBB2 Mouse Monoclonal Antibody - Images

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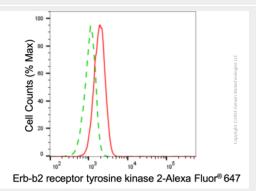
Western blotting analysis using anti-erb-b2 receptor tyrosine kinase 2 antibody (Cat#AGI1909). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot



was incubated with anti-erb-b2 receptor tyrosine kinase 2 antibody (Cat#AGI1909, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-erb-b2 receptor tyrosine kinase 2 antibody (Cat#AGI1909). 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 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-erb-b2 receptor tyrosine kinase 2 antibody (Cat#AGI1909, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Flow cytometric analysis of Erb-b2 receptor tyrosine kinase 2 expression in H9c2 cells using anti-Erb-b2 receptor tyrosine kinase 2 antibody (Cat#AGI1909, 1:2,000). Green, isotype control; red, Erb-b2 receptor tyrosine kinase 2.