

Product datasheet for UM500033CF

OriGene Technologies, Inc.

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Her2 (ERBB2) Mouse Monoclonal Antibody [Clone ID: UMAB33]

Product data:

Product Type: Primary Antibodies

Clone Name: UMAB33

Applications: 10k-ChIP, IF, IHC, WB

Recommended Dilution: WB:1:500, IHC:1:50, IF:1:100

Reactivity: Human, Dog, Mouse, Rat

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Human recombinant protein fragment corresponding to amino acids 676-1255 of human

ERBB2(NP_004439) produced in HEK293T cell.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 137.7 kDa

Gene Name: erb-b2 receptor tyrosine kinase 2

Database Link: NP 004439

Entrez Gene 13866 MouseEntrez Gene 24337 RatEntrez Gene 403883 DogEntrez Gene 2064

<u>Human</u> <u>P04626</u>





Background:

This gene encodes a member of the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. This protein has no ligand binding domain of its own and therefore cannot bind growth factors. However, it does bind tightly to other ligand-bound EGF receptor family members to form a heterodimer, stabilizing ligand binding and enhancing kinase-mediated activation of downstream signalling pathways, such as those involving mitogen-activated protein kinase and phosphatidylinositol-3 kinase. Allelic variations at amino acid positions 654 and 655 of isoform a (positions 624 and 625 of isoform b) have been reported, with the most common allele, Ile654/Ile655, shown here. Amplification and/or overexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors. Alternative splicing results in several additional transcript variants, some encoding different isoforms and others that have not been fully characterized. [provided by RefSeq]

Synonyms: CD340; HER-2; HER-2/neu; HER2; MLN 19; NEU; NGL; TKR1

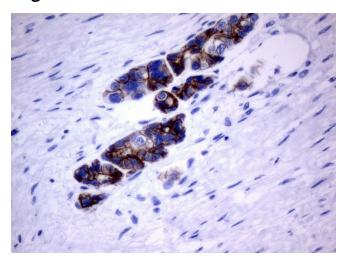
Protein Families: Druggable Genome, Protein Kinase, Transmembrane

Protein Pathways: Adherens junction, Bladder cancer, Calcium signaling pathway, Endometrial cancer, ErbB

signaling pathway, Focal adhesion, Non-small cell lung cancer, Pancreatic cancer, Pathways in

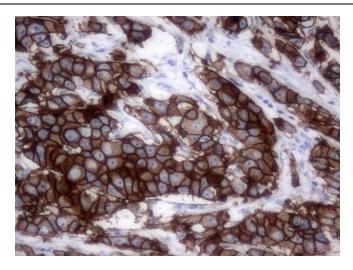
cancer, Prostate cancer

Product images:

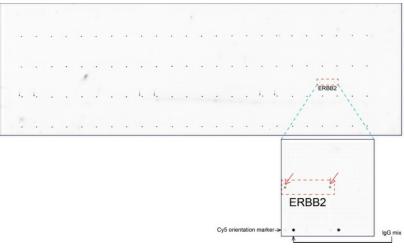


Immunohistochemical staining of paraffinembedded Carcinoma of bladder tissue using anti-ERBB2mouse monoclonal antibody. (Clone UMAB33, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

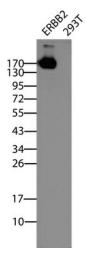




Immunohistochemical staining of paraffinembedded Carcinoma of breast tissue (HER2+++; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) using anti-ERBB2mouse monoclonal antibody. (Clone UMAB33, dilution 1:100; heat-induced epito

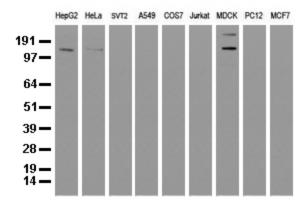


OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-ERBB2 mouse monoclonal antibody (Clone UMAB33). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification. These data show that UltraMAB anti-ERBB2 (Clone UMAB33) very specifically recognizes ERBB2 antigen on OriGene protein microarray chip.

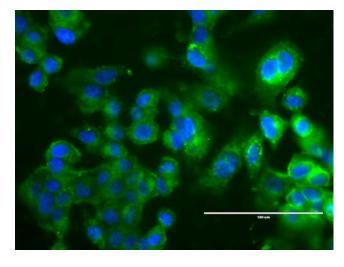


Western blot analysis of cell lysates of HEK293 transfected with ERBB2 cDNA (Left lane) or untransfected (Right lane) by using ERBB2 UltraMAB ([UM500033], clone UMAB33, 1:2000).

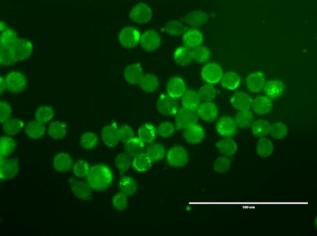




Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ERBB2 monoclonal antibody (Clone UMAB33) at 1:500.

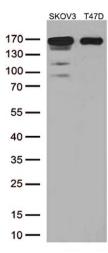


Anti-ERBB2 mouse monoclonal antibody ([UM500033], clone UMAB33, 1:100) immunofluorescent staining of MCF7 cells.



Anti-ERBB2 mouse monoclonal antibody ([UM500033], clone UMAB33, 1:100) immunofluorescent staining of COLO205 cells.





Western blot analysis of extracts (35ug) from 2 different cell lines by using anti-ERBB2 monoclonal antibody (1:500).