

Product datasheet for UM500036

OriGene Technologies, Inc.

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Her2 (ERBB2) Mouse Monoclonal Antibody [Clone ID: UMAB36]

Product data:

Product Type: Primary Antibodies

Clone Name: UMAB36

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

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

Reactivity: Human, Mouse, Rat, Monkey

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

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

ERBB2(NP_004439) produced in HEK293T cell.

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 0.5~1.0 mg/ml (Lot Dependent)

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 697573 MonkeyEntrez Gene

<u>2064 Human</u>

P04626





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, Jul 2008]

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

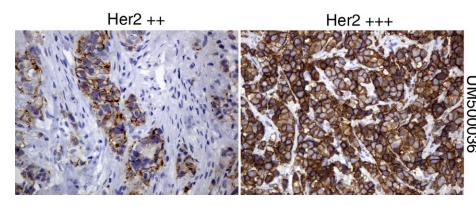
Protein Families: Druggable Genome, Protein Kinase, Transmembrane

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

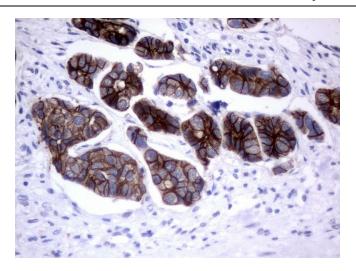
cancer, Prostate cancer

Product images:

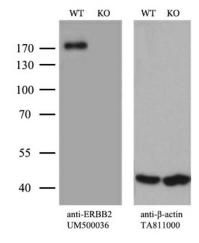


Immunohistochemical staining of paraffinembedded Carcinoma of breast tissue (HER2+++; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) using anti-ERBB2 mouse monoclonal antibody. (Clone UMAB36, dilution 1:100; heat-induced epit

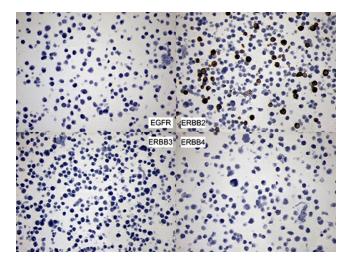




Immunohistochemical staining of paraffinembedded Carcinoma of bladder tissue using anti-ERBB2mouse monoclonal antibody. (Clone UMAB36, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

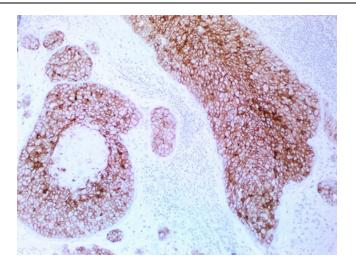


Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and ERBB2-Knockout hela cells (KO, Cat# [LC810070]) were separated by SDS-PAGE and immunoblotted with anti-ERBB2 monoclonal antibody UM500036. Then the blotted membrane was stripped and reprobed with anti- β -actin ([TA811000]) as a loading control (1:500).

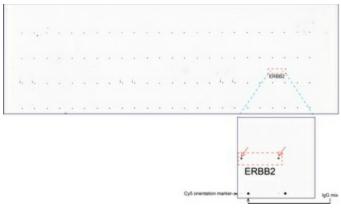


Immunohistochemical staining of four paraffinembedded 293T cell lines transfected with EGFR, ERBB2, ERBB3, or ERBB4 using anti-ERBB2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, UM500036) (1:500). The image shows only ERBB2 transfected cell line lights up with anti-ERBB2 clone UMAB36 showing no cross-reactivity to the other EGFR family members.

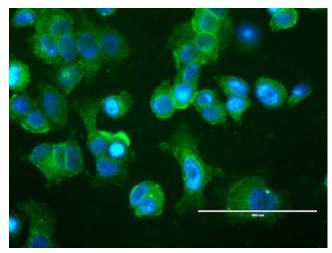




Immunohistochemical staining of FFPE HER2+ breast cancer; using heat-induced epitope retrieval HIER at 120°C for 3min with TEE buffer pH9.0, mouse monoclonal antibody anti-ERBB2 clone UMAB36 was used at 1ug/mL. Strong membrane staining seen in tumor cells.

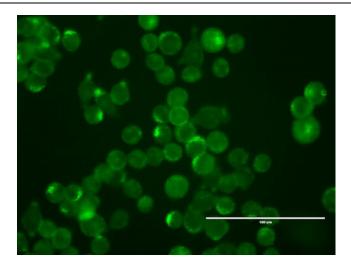


OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-ERBB2 mouse monoclonal antibody (Clone UMAB36). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification. These data show that UltraMAB anti-ERBB2 (Clone UMAB36) very specifically recognizes ERBB2 antigen on OriGene protein microarray chip.

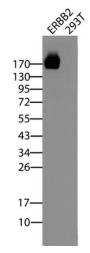


Anti-ERBB2 mouse monoclonal antibody (UM500036, clone UMAB36, 1:100) immunofluorescent staining of MCF7 cells.

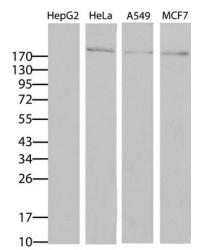




Anti-ERBB2 mouse monoclonal antibody (UM500036, clone UMAB36, 1:100) immunofluorescent staining of COLO205 cells.

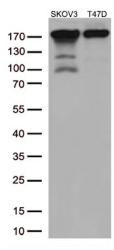


Western blot analysis of cell lysates of HEK293 transfected with ERBB2 cDNA (Left lane) or untransfected (Right lane) by using ERBB2 UltraMAB (UM500036, clone UMAB36, 1:2000).

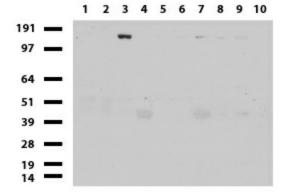


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-ERBB2 monoclonal antibody (Clone UMAB36) at 1:500.





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



Western blot of human tissue lysates (15ug) from 10 different tissues (1: Testis, 2: Omentum, 3: Uterus, 4: Breast, 5: Brain, 6: Liver, 7: Ovary, 8: Thyroid, 9: Colon, 10: Spleen). Diluation: 1:500.