

## Product datasheet for **UM500036CF**

### 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:	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:	<a href="#">NP_004439</a> <a href="#">Entrez Gene 13866 Mouse</a> <a href="#">Entrez Gene 24337 Rat</a> <a href="#">Entrez Gene 697573 Monkey</a> <a href="#">Entrez Gene 2064 Human</a> <a href="#">P04626</a>



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**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:**

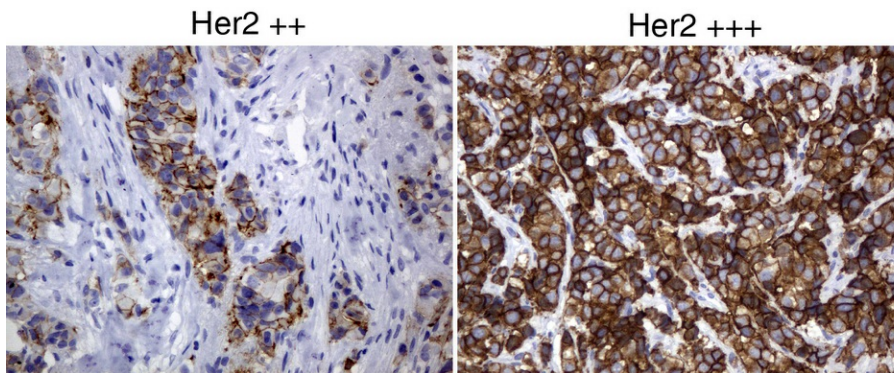
CD340; HER-2; HER-2/neu; HER2; MLN 19; NEU; NGL; TKR1

**Protein Families:**

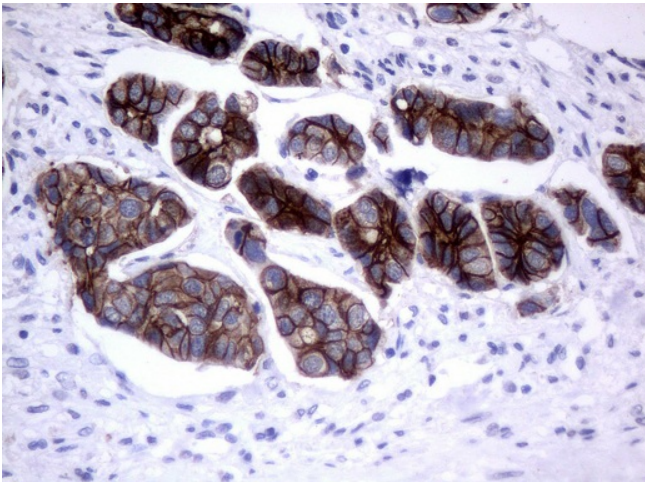
Druggable Genome, Protein Kinase, Transmembrane

**Protein Pathways:**

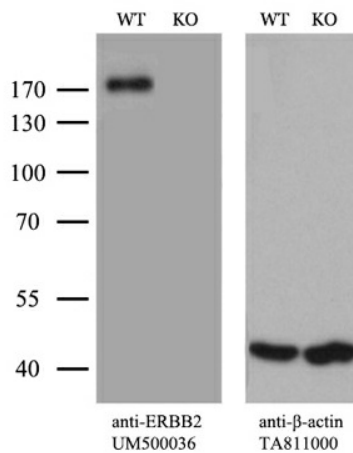
Adherens junction, Bladder cancer, Calcium signaling pathway, Endometrial cancer, ErbB signaling pathway, Focal adhesion, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Prostate cancer

**Product images:**


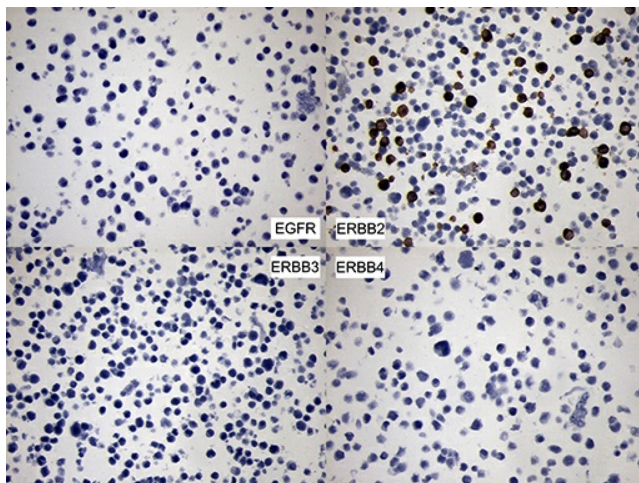
Immunohistochemical staining of paraffin-embedded Carcinoma of breast tissue (HER2+++; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min) using anti-ERBB2 mouse monoclonal antibody. (Clone UMAB36, dilution 1:100; heat-induced epit



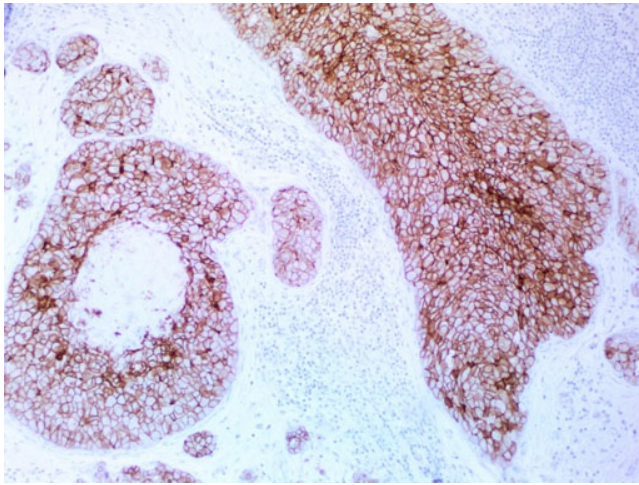
Immunohistochemical staining of paraffin-embedded Carcinoma of bladder tissue using anti-ERBB2 mouse monoclonal antibody. (Clone UMAB36, dilution 1:100; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



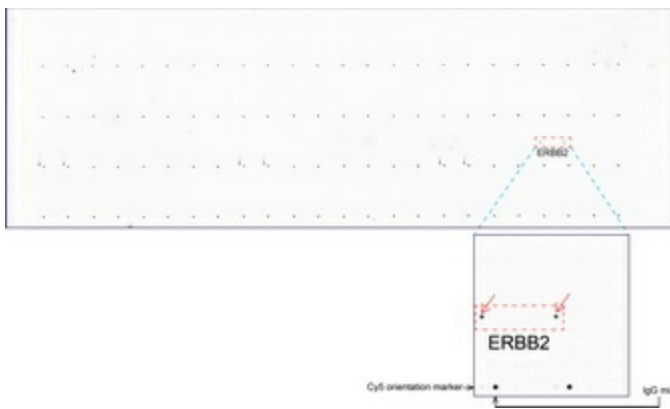
Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and ERBB2-Knockout HeLa cells (KO, Cat# [LC810070]) were separated by SDS-PAGE and immunoblotted with anti-ERBB2 monoclonal antibody [UM500036]. Then the blotted membrane was stripped and reprobed with anti-β-actin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



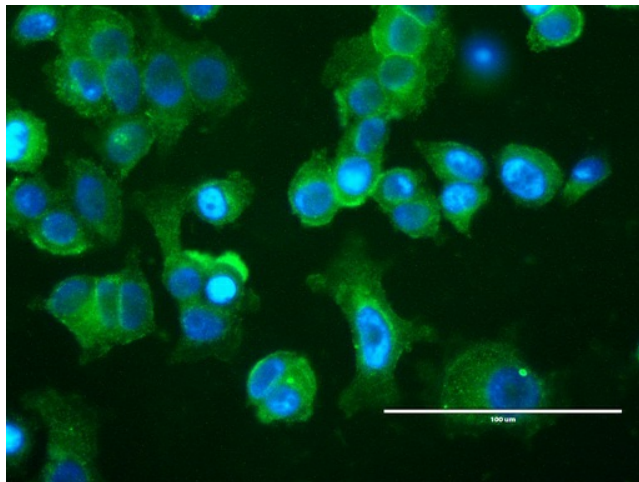
Immunohistochemical staining of four paraffin-embedded 293T cell lines transfected with EGFR, ERBB2, ERBB3, or ERBB4 using anti-ERBB2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [UM500036]) (1:500). The image shows only ERBB2 transfected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



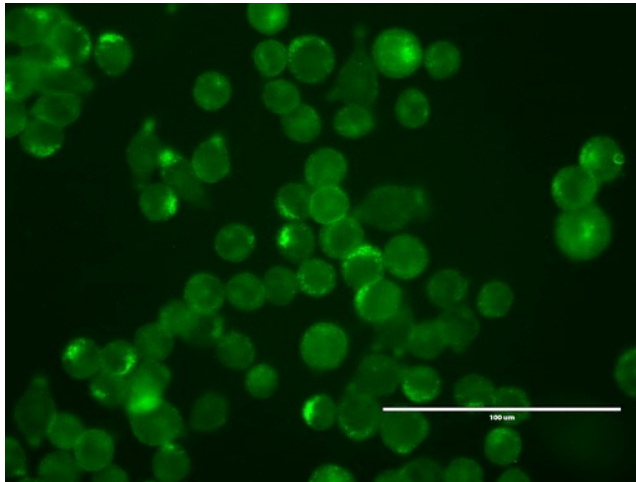
Immunohistochemical staining of FFPE HER2+ breast cancer; using heat-induced epitope retrieval HIER at 120°C for 3min with TEE buffer pH9.0, mouse monoclonal antibody anti-ERBB2 clone UMAB36 was used at 1ug/mL. Strong membrane staining seen in tumor cells.



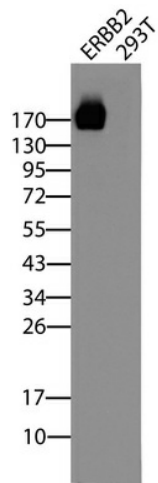
OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-ERBB2 mouse monoclonal antibody (Clone UMAB36). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification.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



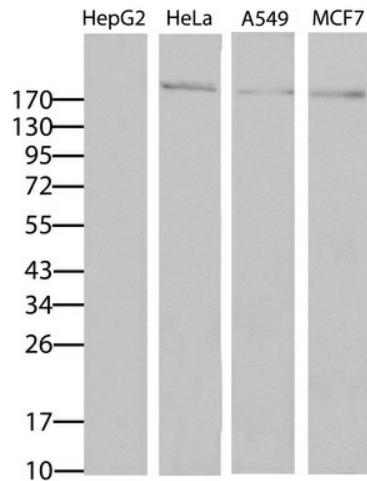
Anti-ERBB2 mouse monoclonal antibody ([UM500036], clone UMAB36, 1:100) immunofluorescent staining of MCF7 cells.



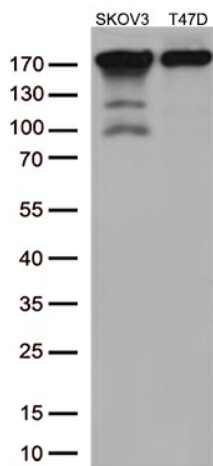
Anti-ERBB2 mouse monoclonal antibody ([UM500036], clone UMAB36, 1:100) immunofluorescent staining of COLO205 cells.



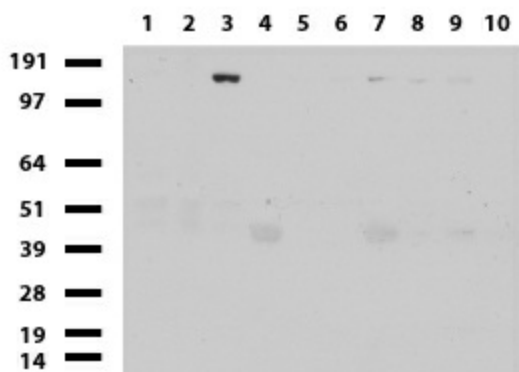
Western blot analysis of cell lysates of HEK293 transfected with ERBB2 cDNA (Left lane) or untransfected (Right lane) by using ERBB2 UltraMAB ([UM500036], clone UMAB36, 1:2000).



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 ). Dilution: 1:500.