

# **Product datasheet for CF503525**

## OriGene Technologies, Inc.

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## Her2 (ERBB2) Mouse Monoclonal Antibody [Clone ID: OTI3F11]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI3F11

**Applications:** FC, IF, IHC, WB

Recommended Dilution: WB 1:2000, IHC 1:150, IF 1:100, FLOW 1:100

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG2b

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 2064 Human

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 kinasemediated activation of downstream signalling pathways, such as those involving mitogenactivated 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

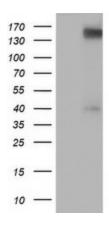
**Protein Families:** Druggable Genome, Protein Kinase, Transmembrane

**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

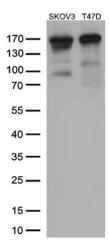
cancer, Prostate cancer

### **Product images:**

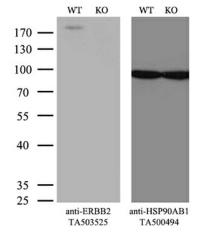


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY ERBB2 ([RC212583], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ERBB2. Positive lysates [LY417979] (100ug) and [LC417979] (20ug) can be purchased separately from OriGene.

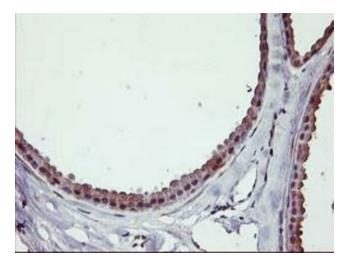




Western blot analysis of extracts (35ug) from 2 different cell lines by using anti-ERBB2 monoclonal antibody (1:500).

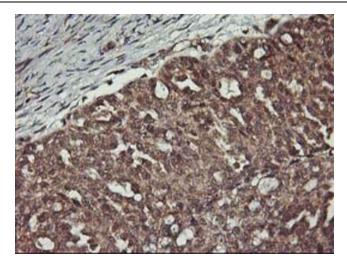


Equivalent amounts of cell lysates (10 ug per lane) of wild-type Hela cells (WT, Cat# LC810HELA) and ERBB2-Knockout Hela cells (KO, Cat# [LC810070]) were separated by SDS-PAGE and immunoblotted with anti-ERBB2 monoclonal antibody [TA503525]. Then the blotted membrane was stripped and reprobed with anti-HSP90AB1 antibody ([TA500494]) as a loading control (1:200).

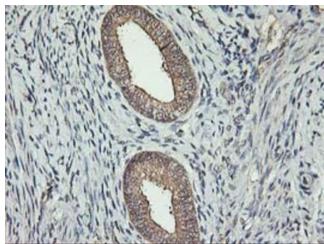


Immunohistochemical staining of paraffinembedded Human breast tissue within the normal limits using anti-ERBB2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503525])

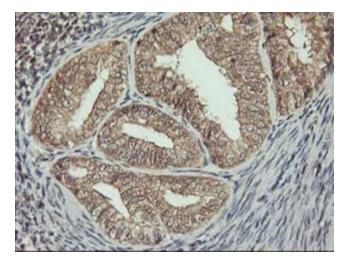




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-ERBB2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503525])

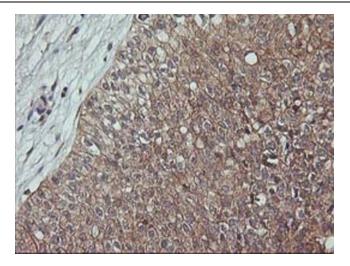


Immunohistochemical staining of paraffinembedded Human endometrium tissue within the normal limits using anti-ERBB2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503525])

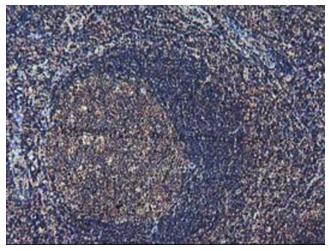


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-ERBB2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503525])

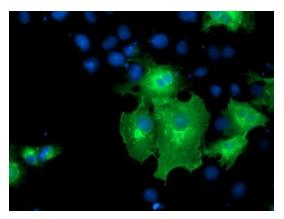




Immunohistochemical staining of paraffinembedded Carcinoma of Human bladder tissue using anti-ERBB2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503525])

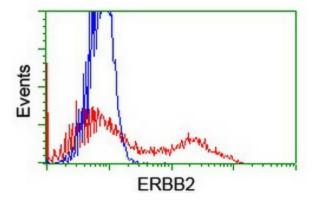


Immunohistochemical staining of paraffinembedded Human tonsil within the normal limits using anti-ERBB2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA503525])

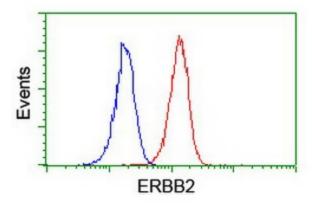


Anti-ERBB2 mouse monoclonal antibody ([TA503525]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY ERBB2 ([RC212583]).





HEK293T cells transfected with either [RC212583] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-ERBB2 antibody ([TA503525]), and then analyzed by flow cytometry.



Flow cytometric Analysis of Jurkat cells, using anti-ERBB2 antibody ([TA503525]), (Red), compared to a nonspecific negative control antibody, (Blue).