

Product datasheet for UM500070CF

OriGene Technologies, Inc.

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EGFR Mouse Monoclonal Antibody [Clone ID: UMAB95]

Product data:

Product Type: Primary Antibodies

Clone Name: UMAB95

Applications: 10k-ChIP, IF, IHC, WB **Recommended Dilution:** WB 1:500, IHC 1:100

Reactivity: Human, Monkey, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human EGFR(NP_958440) 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: 42.4 kDa

Gene Name: epidermal growth factor receptor

Database Link: NP 958440

Entrez Gene 13649 MouseEntrez Gene 24329 RatEntrez Gene 613027 MonkeyEntrez Gene

<u>1956 Human</u> P00533



EGFR Mouse Monoclonal Antibody [Clone ID: UMAB95] - UM500070CF

Background: The protein encoded by this gene is a transmembrane glycoprotein that is a member of the

protein kinase superfamily. This protein is a receptor for members of the epidermal growth factor family. EGFR is a cell surface protein that binds to epidermal growth factor. Binding of the protein to a ligand induces receptor dimerization and tyrosine autophosphorylation and leads to cell proliferation. Mutations in this gene are associated with lung cancer. Multiple alternatively spliced transcript variants that encode different protein isoforms have been

found for this gene. [provided by RefSeq, Jul 2010]

Synonyms: ERBB; ERBB1; ERRP; HER1; mENA; NISBD2; PIG61

Protein Families: Adult stem cells, Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Protein

Kinase, Secreted Protein, Stem cell relevant signaling - JAK/STAT signaling pathway,

Transmembrane

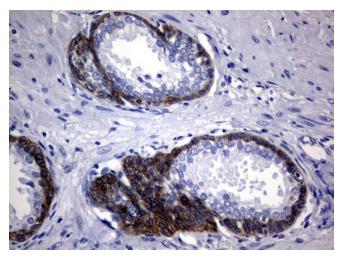
Protein Pathways: Adherens junction, Bladder cancer, Calcium signaling pathway, Colorectal cancer, Cytokine-

cytokine receptor interaction, Dorso-ventral axis formation, Endocytosis, Endometrial cancer,

Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, MAPK signaling pathway, Melanoma, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Prostate

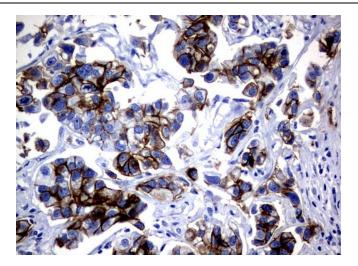
cancer, Regulation of actin cytoskeleton

Product images:

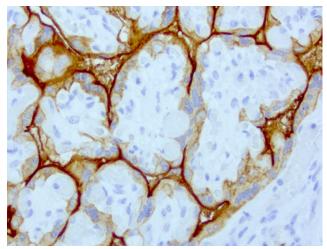


Immunohistochemical staining of paraffinembedded Human prostate tissue using anti-EGFR mouse monoclonal antibody. ([UM500070]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

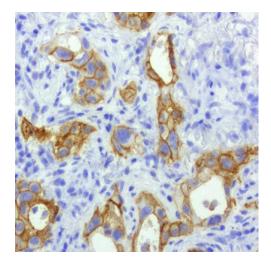




Immunohistochemical staining of paraffinembedded Carcinoma of Human bladder tissue using anti-EGFR mouse monoclonal antibody. ([UM500070]; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

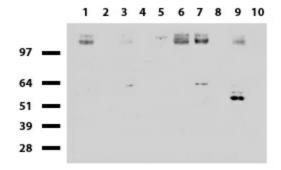


Immunohistochemical staining of paraffinembedded human placenta with mouse anti-EGFR clone UMAB95 1:200 dilution of 400ug/mL using HIER citrate pH6.0 pressure chamber. Placenta known to express high levels in the cytoplasm and membrane trophoblastic cells

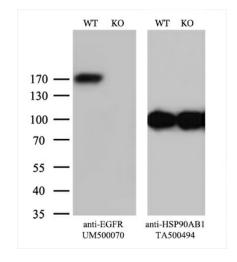


Immunohistochemical staining of paraffinembedded human lung cancer with mouse anti-EGFR clone UMAB95 1:200 dilution of 400ug/mL using HIER citrate pH6.0 pressure chamber. Expression in lung cancer cells are cytoplasmic and membraneous

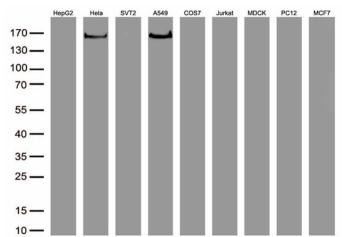




Western blot of human tissue lysates (15ug) from 10 different tissues (1: Testis, 2: Omentum, 3: Uterus, 4: Breast, 5: Brain, 6: Liver, 7: Ovary, 8: Thyroid, 9: Colon, 10: Spleen). Diluation: 1:250.

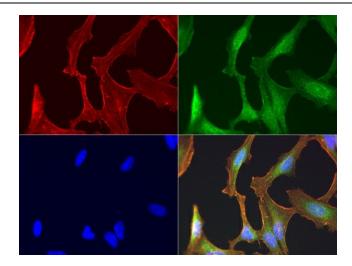


Equivalent amounts of cell lysates (10 ug per lane) of wild-type HeLa cells (WT, Cat# LC810HELA) and EGFR-Knockout HeLa cells (KO, Cat# [LC831281]) were separated by SDS-PAGE and immunoblotted with anti-EGFR monoclonal antibody [UM500070] (1:500). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.

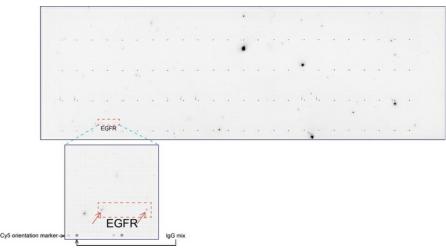


Western blot analysis of extracts (35ug) from 9 different cell lines using an anti-EGFR monoclonal antibody (Clone UMAB95).





Immunofluorescent staining of HeLa cells using anti-EGFR mouse monoclonal antibody ([UM500070], green, 1:50). Actin filaments were labeled with TRITC-phalloidin (red), and nuclear with DAPI (blue).



OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-EGFR mouse monoclonal antibody ([UM500070]). 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.