#### **Product Datasheet**

# EGFR (5E9) Mouse mAb

Catalog No: AB3450 Reactivity: Human
Isotype: Mouse IgG1 Applications: WB,IP



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#### Information

UniProt ID: P00533

All Names: Epidermal growth factor receptor, erbb 1, Receptor tyrosine protein kinase ErbB 1

Form: Liquid

Storage instructions: Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Storage buffer: pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

**Purity:** Affinity-chromatography **Immunogen:** A synthesized peptide

Molecular Wt.: 170kDa

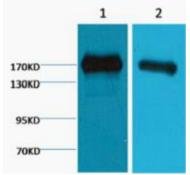
## Application

WB: 1/500-1/2000

IP: 1/200

### Background

Swiss-Prot Acc.P00533.Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses. Known ligands include EGF, TGFA/TGF-alpha, amphiregulin, epigen/EPGN, BTC/betacellulin, epiregulin/EREG and HBEGF/heparin-binding EGF. Ligand binding triggers receptor homo- and/or heterodimerization and autophosphorylation on key cytoplasmic residues. The phosphorylated receptor recruits adapter proteins like GRB2 which in turn activates complex downstream signaling cascades. Activates at least 4 major downstream signaling cascades including the RAS-RAF-MEK-ERK, PI3 kinase-AKT, PLCgamma-PKC and STATs modules. May also activate the NF-kappa-B signaling cascade. Also directly phosphorylates other proteins like RGS16, activating its GTPase activity and probably coupling the EGF receptor signaling to the G protein-coupled receptor signaling. Also phosphorylates MUC1 and increases its interaction with SRC and CTNNB1/beta-catenin. Plays a role in enhancing learning and memory performance.



Western blot analysis of 1) A431, 2) Hela, diluted at 1:2000.

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