

Product Information

Recombinant Anti-Human EGFR Antibody

Cat. No.: **MOM-18165**

This product is for research use only and is not intended for diagnostic use.

Product Overview

Recombinant Humanized Antibody is against Human EGFR, expressed in Chinese Hamster Ovary cells(CHO)

Antigen Description

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.

Specific Activity

Tested positive against native antigen.

Target

EGFR

Source

Humanized

Species Reactivity

Human

Type

Humanized IgG1

Expression Host

CHO

Predicted N terminal

H chain: QVQLVQS; L Chain: DIQMTQS

Purity

Purity >95% by SDS-PAGE.

Applications

Suitable for use in Neut, ELISA and most other immunological methods.

Storage

Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C long term. Avoid repeated freeze/thaw cycles.

ANTIGEN GENE INFORMATION

Gene Name

[EGFR epidermal growth factor receptor \[Homo sapiens \]](#)

Official Symbol

EGFR

Synonyms

EGFR; epidermal growth factor receptor; epidermal growth factor receptor (avian erythroblastic leukemia viral (v erb b) oncogene homolog) , ERBB; ERBB1; erythroblastic leukemia viral (v erb b) oncogene homolog (avian); proto-oncogene c-ErbB-1; cell growth inhibiting protein 40; cell proliferation-inducing protein 61; receptor tyrosine-protein kinase erbB-1; avian erythroblastic leukemia viral (v-erb-b) oncogene homolog; ERBB; HER1; mENA; PIG61;

Gene ID

[1956](#)

mRNA Refseq

[NM_005228](#)

Protein Refseq

[NP_005219](#)

MIM

[131550](#)

UniProt ID

P00533

Chromosome Location

7p12

Pathway

Adherens junction, organism-specific biosystem; Adherens junction, conserved biosystem; Alpha6-Beta4 Integrin Signaling Pathway, organism-specific biosystem; Androgen Receptor Signaling Pathway, organism-specific biosystem; Arf6 signaling events, organism-specific biosystem; Axon guidance, organism-specific biosystem; Bladder cancer, organism-specific biosystem;

Function

ATP binding; MAPK/ERK kinase kinase activity; actin filament binding; double-stranded DNA binding; enzyme binding; epidermal growth factor-activated receptor activity; epidermal growth factor-activated receptor activity; identical protein binding; contributes_to nitric-oxide synthase regulator activity; nucleotide binding; protein binding; protein heterodimerization activity; protein phosphatase binding; protein tyrosine kinase activity; protein tyrosine kinase activity; protein tyrosine kinase activity; receptor activity; receptor signaling protein tyrosine kinase activity; signal transducer activity; transmembrane receptor protein tyrosine kinase activity; transmembrane receptor protein tyrosine kinase activity; transmembrane signaling receptor activity;