

## PRODUCT INFORMATION

<b>Target</b>	EGFR
<b>Synonyms</b>	Epidermal growth factor receptor;Egfr
<b>Description</b>	Recombinant mouse EGFR protein with C-terminal 6×His tag
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	Q01279
<b>Expression Host</b>	HEK293
<b>Tag</b>	C-6×His Tag
<b>Molecular Characterization</b>	Mouse EGFR(Leu25-Ser647) 6×His tag
<b>Molecular Weight</b>	The protein has a predicted molecular mass of 70.1kDa after removal of the signal peptide. The apparent molecular mass of mEGFR-His is approximately 100-130 kDa due to glycosylation.
<b>Purity</b>	The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.
<b>Formulation &amp; Reconstitution</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
<b>Storage &amp; Shipping</b>	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.
<b>Background</b>	Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses (PubMed:8404850). Known ligands include EGF, TGFA/TGF-alpha, AREG, 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 (By similarity). Plays a role in enhancing learning and memory performance (PubMed:20639532).[UniProtKB/Swiss-Prot Function]
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



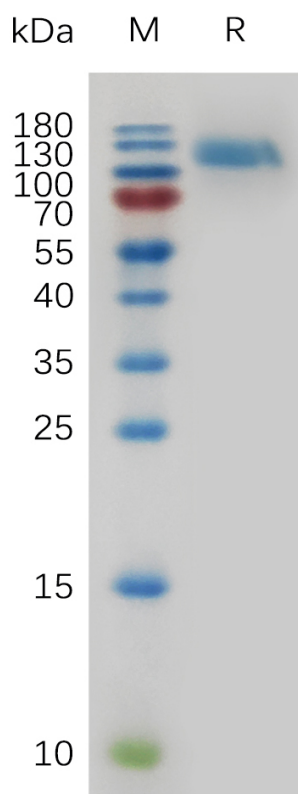


Figure 1. Mouse EGFR Protein, His Tag on SDS-PAGE under reducing condition.

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