

PRODUCT INFORMATION

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| Target | EGFR |
| Synonyms | Epidermal growth factor receptor;Egfr |
| Description | Recombinant mouse EGFR protein with C-terminal 6×His tag |
| Delivery | In Stock |
| Uniprot ID | Q01279 |
| Expression Host | HEK293 |
| Tag | C-6×His Tag |
| Molecular Characterization | Mouse EGFR(Leu25-Ser647) 6×His tag |
| Molecular Weight | 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. |
| Purity | The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining. |
| Formulation & Reconstitution | 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. |
| Storage & Shipping | 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. |
| Background | 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] |
| Usage | Research use only |
| Conjugate | Unconjugated |



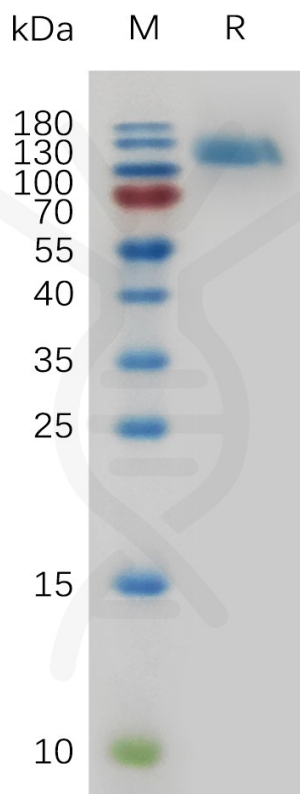


Figure 1. Mouse EGFR Protein, His Tag on SDS-PAGE under reducing condition.

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