

## 32-6964: EGFR Human, CHO

### Alternative Name :

Epidermal Growth Factor Receptor, Receptor Tyrosine-Protein Kinase ErbB-1, ErbB2 Receptor Tyrosine Kinase, Proto-Oncogene C-ErbB-1, EC 2.7.10.1, ERBB1, ERBB, HER1, Epidermal Growth Factor Receptor (Avian Erythroblastic Leukemia Viral (V-Erb-B) Oncogene Homolog), Erythroblastic Leukemia Viral (V-Erb-B) Oncogene Homolog (Avian), Avian Erythroblastic Leukemia Viral (V-Erb-B) Oncogene Homolog, Cell Proliferation-Inducing Protein 61, Cell Growth Inhibiting Protein 40, EC 2.7.10, NISBD2, PIG61, MENA.

### Description

Source: Chinese Hamster Ovary cells.

Sterile Filtered colorless solution.

The epidermal growth factor receptor (EGF R) subfamily of receptor tyrosine kinases comprises four members: EGF R (also known as HER1, ErbB1 or ErbB), ErbB2 (Neu, HER-2), ErbB3 (HER-3), and ErbB4 (HER-4). All family members are type I transmembrane glycoprotein that has an extracellular domain which contains two cysteine-rich domains separated by a spacer region that is involved in ligand-binding, and a cytoplasmic domain which has a membrane-proximal tyrosine kinase domain and a C-terminal tail with multiple tyrosine autophosphorylation sites. The human EGF R gene encodes a 1210 amino acid (aa) residue precursor with a 24 aa putative signal peptide, a 621 aa extracellular domain, a 23 aa transmembrane domain, and a 542 aa cytoplasmic domain. EGF R has been shown to bind a subset of the EGF family ligands, including EGF, amphiregulin, TGF $\alpha$ , betacellulin, epiregulin, heparin-binding EGF and neuregulin-2 in the absence of a co-receptor. Ligand binding induces EGF R homodimerization as well as heterodimerization with ErbB2, resulting in kinase activation, tyrosine phosphorylation and cell signaling. EGF R can also be recruited to form heterodimers with the ligand-activated ErbB3 or ErbB4. EGF R signaling has been shown to regulate multiple biological functions including cell proliferation, differentiation, motility and apoptosis. In addition, EGF R signaling has also been shown to play a role in carcinogenesis.

EGFR produced in CHO cells is a single, glycosylated polypeptide chain containing 860 amino acids (25-645 a.a.) and having a molecular mass of 95.5 kDa (Migrates at 100-150 on SDS-PAGE under reducing conditions). EGFR is expressed with a 239 amino acid hlgG-His tag at C-Terminus and purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 1  $\mu$ g / 5  $\mu$ g

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

**Content :** EGFR protein solution (0.25mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** LEEKKVCQGT SNKLTQLGTF EDHFLSLQRM FNNCEVVLGN LEITYVQRNY DLSFLKTIQE VAGYVLIALN TVERIPLNL QIIRGNMYE NSYALAVLSN YDANKTGLKE LPMRNLQEIL HGAVRFSNPN ALCNVESIQW RDIVSSDFLS NMSMDFQNLH GSCQKCDPSC PNGSCWGAGE ENCQKLTKEI CAQCSCGRCR GKSPSDCCHN QCAAGCTGPR ESDCLVCRKF RDEATCKDTC PPLMLYNPTT YQMDVNPEGK YSFGATCVKK CPRNYVVDH GSCVRACGAD SYEMEEDGVR KCKKCEGPCR KVCNGIGIGE FKDSLSINAT NIKHFKNCTS ISGDLHILPV AFRGDSFTHT PPLDPQELDI LKTVEITGF LLIQAWPENR TDLHAFENLE IIRGRKQHG QFSLAVVSLN ITSLGLRSLK EISDGDVVIS GNKNLCYANT INWKKLFGTS GQKTKIISNR GENSKATGQ VCHALCSPEG CWGPEPRDCV SCRNVSRGRE CVDKCNLLEG EPREFVENSE CIQCHPECLP QAMNITCTGR GPDNCIQCAH YIDGPHCVKT CPAGVMGENN TLWVKYADAG HVCHLCHPNC TYGCTGPGLE GCPTNGPKIP SRSPKSCDKT HTPPCPAPE LLGGPSVFLF PPKPKDTLMI SRTPEVTCVV VDVSHEDPEV KFNWYVDGVE VHNAKTKPRE EQYNSTYRVV SVLTVLHQDW LNGKEYKCKV SNKALPAPIE KTISKAKGQP REPQVYTLPP SRDELTKNQV SLTCLVKGFY PSDIAVEWES NGQPENNYKT TPPVLDSGDS FFLYSKLTVD KSRWQQGNVF SCSVMHEALH NHYTQKLSL SPGKHHHHHH.