

32-6964: EGFR Human, CHO

Alternative Name :

Epidermal Growth Factor Receptor, Receptor Tyrosine-Protein Kinase ErbB-1, Erb-B2 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 α , 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 μ g / 5 μ 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 :	<p>LEEKVCQGT SNKLTQLGTF EDHFLSLQRM FNNCEVVLGN LEITYVQRNY DLSFLKTIQE VAGYVLIALN</p> <p>TVERIPLNLI QIRGNMYEE NSYALAVLSN YDANKTGLKE LPMRNLQEIL HGAVRFSNNP ALCNVESIQW</p> <p>RDIVSSDFLS NMSMDFQNLH GSCQKCDPSC PNGSCWGAGE ENCQKLTKEI CAQCSCGRCR</p> <p>GKSPSDCCHN QCAAGCTGPR ESDCLVCRKF RDEATCKDTC PPLMLYNPTT YQMDVNPEGK</p> <p>YSFGATCVKK CPRNYVVDTH GSCVRACGAD SYEMEEDGVR KCKKCEGPCR KVCNGIGIGE FKDSLSINAT</p> <p>NIKHFKNCTS ISGDLHLIPV AFRGDSFTHT PPLDPQELDI LKTVEITGF LLIQAWPENR TDLHAFENLE</p> <p>IIRGRKQHG QFSLAVVSLN ITSLGLRLSK EISDGDVVIS GNKNLCYANT INWKKLFGTS GQKTKIISNR</p> <p>GENSCKATGQ VCHALCSPEG CWGPEPRDCV SCRNVSRGRE CVDKCNLLEG EPREFVENSE</p> <p>CIQCHPECLP QAMNITCTGR GPDNCIQCAH YIDGPHCVKT CPAGVMGENN TLVWKYADAG</p> <p>HVCHLCHPNC TYGCTGPGLE GCPTNGPKIP SRSPKSCDKT HTPPCPAPE LLGGPSVFLF PPKPKDTLMI</p> <p>SRTPEVTCVV VDVSHEDPEV KFNWYVDGVE VHNAKTKPRE EQYNSTYRVV SVLTVLHQDW</p> <p>LNGKEYKCKV SNKALPAIE KTISKAKGP REPQVYTLPP SRDELTKNQV SLTCLVKGFY PSIDIAVEWES</p> <p>NGQPENNYKT TPPVLDSDGS FFLYSKLTVD KSRWQQGNVF SCSVMHEALH NHYTQKSLSL</p> <p>SPGKHHHHHH.</p>