Human EGFR soluble (InCs)

Synonyms: EGF receptor, EGFR, ERBB, HER1, mENA, ERBB1, PIG61

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot #	Expiry Date
10 µg	2100.952.010		
25 µg	2100.952.025		
200 µg	2100.952.200		

Please enquire for bulk quantities and other vial sizes

Description

Recombinant human soluble EGFR is produced as a glycosylated monomeric protein with a mass of approximately 70 kDa in insect cells. The epidermal growth factor receptor (EGFR) subfamily of receptor tyrosine kinases comprises four members: EGFR (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 EGFR gene encodes a 1210 amino acid (aa) residue precursor with a 24aa putative signal peptide, a 621aa extracellular domain, a 23aa transmembrane domain, and a 542aa cytoplasmic domain. EGFR 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 EGFR homodimerization as well as heterodimerization with ErbB2, resulting in kinase activation, tyrosine phosphorylation and cell signaling. EGFR can also be recruited to form heterodimers with the ligand-activated ErbB3 or ErbB4. EGFR signaling has been shown to regulate multiple biological functions including cell proliferation, differentiation, motility and apoptosis. In addition, EGFR signaling has also been shown to play a role in carcinogenesis.

- **Source** Insect cells
- **Purity** ≥ 90% (SDS-PAGE, silver stained)

Biological Activity

Testing in Progress.

Reconstitution

The lyophilized sEGFR is soluble in water and most aqueous buffers. The lyophilized sEGFR should be reconstituted in water or PBS to a concentration of not lower than 50µg/ml.

Amino Acid Sequence

LEEKKVCQGT SNKLTQLGTF EDHFLSLQRM FNNCEVVLGN LEITYVQRNY DLSFLKTIQE VAGYVLIALN
TVERIPLENL QIIRGNMYYE NSYALAVLSN YDANKTGLKE LPMRNLQEIL HGAVRFSNNP ALCNVESIQW
RDIVSSDFLS NMSMDFQNHL GSCQKCDPSC PNGSCWGAGE ENCQKLTKII CAQQCSGRCR GKSPSDCCHN
QCAAGCTGPR ESDCLVCRKF RDEATCKDTC PPLMLYNPTT YQMDVNPEGK YSFGATCVKK CPRNYVVTDH
GSCVRACGAD SYEMEEDGVR KCKKCEGPCR KVCNGIGIGE FKDSLSINAT NIKHFKNCTS ISGDLHILPV
AFRGDSFTHT PPLDPQELDI LKTVKEITGF LLIQAWPENR TDLHAFENLE IIRGRTKQHG QFSLAVVSLN
ITSLGLRSLK EISDGDVIIS GNKNLCYANT INWKKLFGTS GQKTKIISNR GENSCKATGQ VCHALCSPEG
CWGPEPRDCV SCRNVSRGRE CVDKCNLLEG EPREFVENSE CIQCHPECLP QAMNITCTGR GPDNCIQCAH
YIDGPHCVKT CPAGVMGENN TLVWKYADAG HVCHLCHPNC TYGCTGPGLE GCPTNGPKIP S

Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

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