

EGFR, soluble Active Protein | EGFR active protein

Human EGFR, soluble

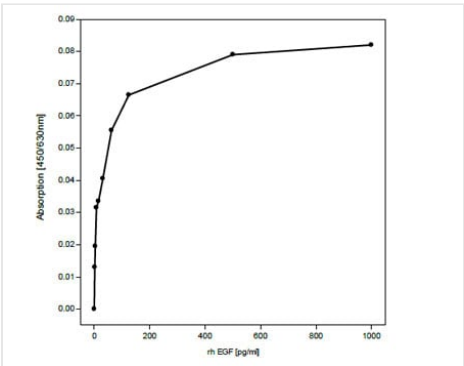
CATALOG # AAA79134	HOST Insect Cells	REACTIVITY Human
------------------------------	-----------------------------	----------------------------

PRODUCT SYNONYMS

EGFR; soluble; Human EGFR; Recombinant Human Soluble EGFR; Epidermal growth factor receptor; Proto-oncogene c-ErbB-1; EGFR active protein

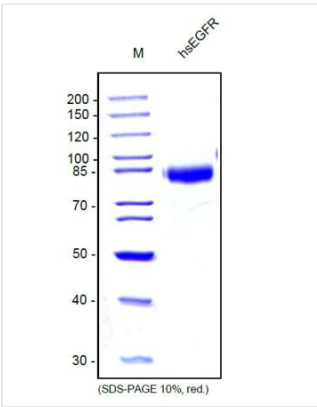
PRODUCT SPECIFICATIONS

Host	Insect Cells
Reactivity	Human
Purity/Purification	> 90% by SDS-PAGE
Form/Format	Lyophilized
Sequence	LEEKKVCQGT SNKLTQLGTF EDHFLSLQRM FNNCEVVLGN LEITYVQRNY DLSFLKTIQE VAGYVLIALN TVERIPLNL QIIRGNMYYE NSYALAVLSN YDANKTGLKE LPMRNLQEIL HGAVRFSNPA LCNVESIQWR DIVSSDFLSN MSMDFQNHG SCQKCDPSCP NGSCWGAGEE NCQKLTKIIC AQCSCGRCRG KSPSDCCHNQ CAAGCTGPRE SDCLVCRKFR DEATCKDTCPLMLYNPTTY QMDVPEGKYS FGATCVKKCP RNYVVDHGS CVRACGADSY EMEEDGVRKC KKCEGPCRKV CNGIGIGEFK DLSINATNI KHFKNCTIS GDLHILPVAF RGDSFTHTPP LDPQELDILK TVKEITGFL IAWPENRTDL HAFENLEIIR GRTKQHGQFS LAVVSLNITS LGLRSLKEIS DGDVIISGNK NLCYANTINW KKLFGTSGQK TKIISNRGEN SCKATGQVCH ALCSPGECWG PEPRDCVSCR NVSRGRECDK CNLLEGEPRE FVENSECIQC HPECLPQAMN ITCTGRGPDN CIQCAHYIDG PHCVKTCAPG VMGENNTLVW KYADAGHVCH LCHPNCTYGC TGPGLGECPT NGPKIPSWSH PQFEK
Sequence Length	629
Biological Activity	Measured by its ability to bind to immobilized recombinant human EGF in a functional ELISA.
Buffer	PBS
Length (aa)	629
Reconstitution	The lyophilized sEGFR is soluble in water and most aqueous buffers and should be reconstituted in PBS or medium to a concentration not lower than 50ug/ml.
Preparation and Storage	Lyophilized samples are stable for greater than six months at -20 degree C to -70 degree C. Reconstituted sEGFR should be stored in working aliquots at -20 degree C. Avoid repeated freeze-thaw cycles!



BioLISA

Fig 2: Binding of sEGFRto recombinant human EGF in a functional ELISA. EGF [AAA79134] was coated with 200ng/well to a 96-well plate and sEGFR was added with increasing concentrations up to 4000ng/ml. Detection was performed using a polyclonal rabbit anti-human EGFR [] (1 ug/ml, 100 ul/well) and a goat anti-rabbit Biotin conjugated secondary antibody.



SDS-PAGE

Fig. 1: SDS-PAGE analysis of recombinant human soluble EGFR from insect cells. Sample was loaded in 10% SDS-polyacrylamide gel under reducing conditions and stained with Coomassie Blue.

ADDITIONAL INFORMATION

Related Product Information for EGFR active protein	Recombinant human soluble EGFR, fused to a C-terminal Strep-tag, is produced as a glycosylated monomeric protein with a mass of approximately 80kDa 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.
Product Categories/Family for EGFR active protein	Soluble receptors
References	1. Daly, R.J., Growth Factors, 16:255, 1999 2. Schlessinger, J., Cell. 103:211, 2000 3. Maihle, N.J. et al., Cancer Treat. Res. 107:247, 2002

NCBI AND UNIPROT INFORMATION

NCBI GI #	29725609
NCBI GeneID	1956
NCBI Accession #	NP_005219.2
NCBI GenBank Nucleotide #	NM_005228.3
UniProt Accession #	P00533; O00688; O00732; P06268; Q14225; Q68GS5; Q92795; Q9BZS2; Q9GZX1; Q9H2C9; Q9H3C9; Q9UMD7
Molecular Weight	~85 kDa
NCBI Official Full Name	epidermal growth factor receptor isoform a
NCBI Official Synonym Full Names	epidermal growth factor receptor
NCBI Official Symbol	EGFR

NCBI Official Synonym Symbols	ERBB; HER1; mENA; ERBB1; PIG61
NCBI Protein Information	epidermal growth factor receptor; proto-oncogene c-ErbB-1; cell growth inhibiting protein 40; cell proliferation-inducing protein 61; receptor tyrosine-protein kinase erbB-1; avian erythroblastic leukemia viral (v-erb-b) oncogene homolog
UniProt Protein Name	Epidermal growth factor receptor
UniProt Gene Name	EGFR
UniProt Synonym Gene Names	ERBB; ERBB1; HER1
UniProt Entry Name	EGFR_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/insect-cells-human-active-protein/egfr-soluble/79134>