

## Epidermal Growth Factor Receptor-Sf9 Recombinant Protein | EGFR recombinant protein

Recombinant Human Epidermal Growth Factor Receptor-Sf9 (ErbB1)

CATALOG #  
**AAA38571**

HOST  
**Sf9 Insect Cells**

### PRODUCT SYNONYMS

Epidermal Growth Factor Receptor-Sf9; Recombinant Human Epidermal Growth Factor Receptor-Sf9 (ErbB1); EGFR Human Sf9; Epidermal Growth Factor Receptor Sf9 Human Recombinant; Epidermal growth factor receptor; EC 2.7.10.1; Receptor tyrosine-protein kinase ErbB-1; ERBB; mENA; ERBB1; EGFR; EGFR Sf9; EGFR recombinant protein

### PRODUCT SPECIFICATIONS

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| Host                    | Sf9 Insect Cells                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Purity/Purification     | Greater than 90.0% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Form/Format             | ErbB1 was lyophilized from a concentrated (1mg/ml) sterile solution containing 1x PBS pH-7.4.<br>Sterile Filtered White lyophilized (freeze-dried) powder.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Sequence                | LEEKKVCQGT SNKLTQLGTF EDHFLSLQRM FNNCEVVLGN LEITYVQRNY DLSFLKTIQE VAGYVLIALN<br>TVERIPLNL QIIRGNMYE NSYALAVLSN YDANKTGLKE LPMRNLQEIL HGAVRFSNNP ALCNVESIQW<br>RDIVSSDFLS NMSMDFQNLH GSCQKCDPSC PNGSCWGAGE ENCQKLTII CAQQCSGRGR GKSPSDCCHN<br>QCAAGCTGPR ESDCLVCRKF RDEATCKDTC PPLMLYNPTT YQMDVNPEGK YSFGATCVKK CPRNYVVDH<br>GSCVRACGAD SYEMEEDGVR KCKKCEGPCR KVCNGIGIGE FKDSLINAT NIKHFKNCTS ISGDLHILPV<br>AFRGDSFTHT PPLDPQELDI LKTVKEITGF LLIQAWPENR TDLHAFENLE IIRGRKQHG QFSLAVVSLN<br>ITSLGLRSLK EISDGDVIIS GNKNLCYANT INWKKLFGTS GQKTKIISNR GENSKATGQ VCHALCSPEG<br>CWGPEPRDCV SCRNVSRGRE CVDKCKLLEG EPREFVENSE CIQCHPECLP QAMNITCTGR GPDNCIQCAH<br>YIDGPHCVKT CPAGVMGENN TLVWKYADAG HVCHLCHPNC TYGCTGPGLE GCPTNGPKIP SIAASWSHPQ<br>FEK |
| Sequence Length         | 1210                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Solubility              | It is recommended to reconstitute the lyophilized EGFR in sterile PBS not less than 100 ug/ml, which can then be further diluted to other aqueous solutions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Preparation and Storage | Lyophilized EGFR although stable at room temperature for 3 weeks, should be stored desiccated below -18 degree C. Upon reconstitution EGFR should be stored at 4 degree C between 2-7 days and for future use below -18 degree C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                     |

## ADDITIONAL INFORMATION

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| Related Product Information for EGFR recombinant protein | <p><b>Description:</b> The EGFR contains the extracellular domain of the human EGFR (25-647 a.a.) excluding the signal peptide which is cleaved by the insect cells having an approximate Mw of 85kDa. The EGFR is fused to a C-terminal Strep-tag and purified by proprietary chromatographic techniques.</p> <p><b>Introduction:</b> 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-<math>\beta</math>, 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.</p> |
| Product Categories/Family for EGFR recombinant protein   | Protein Kinases; Enzymes; EGF Receptor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## NCBI AND UNIPROT INFORMATION

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|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                 | 69,228 Da                                                                                                                                                                                                                                                                        |
| 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; NISBD2                                                                                                                                                                                                                                           |
| NCBI Protein Information         | epidermal growth factor receptor; avian erythroblastic leukemia viral (v-erb-b) oncogene homolog; cell growth inhibiting protein 40; cell proliferation-inducing protein 61; erb-b2 receptor tyrosine kinase 1; proto-oncogene c-ErbB-1; receptor tyrosine-protein kinase erbB-1 |
| 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.