DATASHEET
Version 20181206

EGF R/ErbB1 Fc Chimera, Human

Cat. No.: Z03381-50

Size: 50.0 ug

Synonyms: EGF Receptor/ErbB1 Fc Chimera, Human

Description:

EGF Receptor, also known as ERBB, ERBB1 and HER1, is a type I transmembrane protein belonging to the tyrosine protein kinase family. It binds to a subset of EGF family ligands, including EGF, TGF-alpha, amphiregulin, EPGN, BTC, EREG and HBEGF. Ligand binding triggers receptor homo- or hetero-dimerization, which induces downstream kinase activation, tyrosine phosphorylation and cell signaling. EGF receptor signaling has been shown to regulate cell proliferation, differentiation, motility and apoptosis.
Recombinant Human EGF-R/ErbB1 Fc Chimera produced in *CHO* cells is a polypeptide chain containing 854 amino acids with the C-termimal human IgG1 Fc fragment. A fully biologically active molecule, rhEGF-R/ErbB1 has a molecular mass of 12-125 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 LEEKKVCQGT SNKLTQLGTF EDHFLSLQRM FNNCEVVLGN
00041 LEITYVQRNY DLSFLKTIQE VAGYVLIALN TVERIPLENL
00081 QIIRGNMYYE NSYALAVLSN YDANKTGLKE LPMRNLQEIL
00121 HGAVRFSNNP ALCNVESIQW RDIVSSDFLS NMSMDFQNHL
00161 GSCQKCDPSC PNGSCWGAGE ENCQKLTKII CAQQCSGRCR
00201 GKSPSDCCHN QCAAGCTGPR ESDCLVCRKF RDEATCKDTC
00241 PPLMLYNPTT YQMDVNPEGK YSFGATCVKK CPRNYVVTDH
00281 GSCVRACGAD SYEMEEDGVR KCKKCEGPCR KVCNGIGIGE
00321 FKDSLSINAT NIKHFKNCTS ISGDLHILPV AFRGDSFTHT
00361 PPLDPQELDI LKTVKEITGF LLIQAWPENR TDLHAFENLE
00401 IIRGRTKQHG QFSLAVVSLN ITSLGLRSLK EISDGDVIIS
00441 GNKNLCYANT INWKKLFGTS GQKTKIISNR GENSCKATGQ
00481 VCHALCSPEG CWGPEPRDCV SCRNVSRGRE CVDKCNLLEG
00521 EPREFVENSE CIQCHPECLP QAMNITCTGR GPDNCIQCAH
00561 YIDGPHCVKT CPAGVMGENN TLVWKYADAG HVCHLCHPNC
00601 TYGCTGPGLE GCPTNGPKIP S
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Source: *CHO*

Biological Activity: Measured by its ability to bind rhEGF in a functional ELISA with an estimated K_D <10 nM.

Molecular Weight: 120-125 kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized from a 0.2 μm filtered solution in PBS.

Reconstitution: Reconstituted in ddH_2O or PBS at 100 μg/ml.

Purity: > 95% as analyzed by reducing SDS-PAGE.

Endotoxin Level: < 0.2 EU/μg, determined by LAL method.

Storage: Lyophilized recombinant Human EGF-R/ErbB1 Fc Chimera remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Human EGF-R/ErbB1 should be stable up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

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