

EGFR, His, Human

Cat. No.: Z03194-1

Size: 1.0 mg

Synonyms: ErbB1, HER1

Description:

Epidermal Growth Factor Receptor (EGFR) belongs to a family of tyrosine kinase receptors including Human EGF Receptors (HER) 2, 3, and 4 which all play important roles in cell growth and differentiation. Their primary ligands are EGF, Heparin-Binding EGF and Transforming Growth Factor α . Upon ligand binding, EGFR undergoes asymmetric dimerization, composed of an "activator" and a "receiver". EGFR and its family members are dysregulated in numerous cancers. In particular, EGFR is overexpressed in many epithelial solid tumors. Evidence suggests EGFR is an excellent target for pharmacologic intervention in Non Small Cell Lung Cancer (NSCLC) due to its high level of expression and prominent role in tumor growth and metastasis.

Recombinant human Epidermal Growth Factor Receptor (rhEGFR) with C-terminal 6xHis-tag produced in Sf9 insect cells is a single glycosylated polypeptide chain containing 627 amino acids. rhEGFR has a molecular mass of 80kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Amino Acid Sequence:

```
00001 LEEKKVCQGT SNKLTQLGTF EDHFLSLQRM FNNCEVVLGN
00041 LEITYVQRNY DLSFLKTIQE VAGYVLIALN TVERIPLLENL
00081 QIIRGNMYE NSYALAVLSN YDANKTGLKE LPMRNLQEIL
00121 HGAVRFSNNP ALCNVESIQW RDIVSSDFLS NMSMDFQNHL
00161 GSCQKCDPSC PNGSCWGAGE ENCQKLTKII CAQCSGRCR
00201 GKSPSDCCHN QCAAGCTGPR ESDCLVCRKF RDEATCKDTC
00241 PPLMLYNPTT YQMDVNPEGK YSFGATCVKK CPRNYVVTDH
00281 GSCVRACGAD SYEMEEEDGVR KCKKCEGPCR KVCNGIGIGE
00321 FKDSLINAT NIKHFKNCTS ISGDLHILPV AFRGDSFTHT
00361 PPLDPQELDI LKTVKEITGF LLIQAWPENR TDLHAFENLE
00401 IIRGRTKQHG QFSLAVVSLN ITSLGLRSLK EISDGDVVIS
00441 GNKNLCYANT INWKKLFGTS GQKTKIISNR GENSKATGQ
00481 VCHALCSPEG CWGPEPRDCV SCRNVSRGRE CVDKCNLLEG
00521 EPREFVENSE CIQCHPECLP QAMNITCTGR GPDNCIQCAH
00561 YIDGPHCVKT CPAGVMGENN TLVWKYADAG HVCHLCHPNC
00601 TYGCTGPGL E GCPTNGPKIP SHHHHHH
```

Source: Sf9 insect cells

Species: Human

Biological Activity: Bioassay data are not available.

Molecular Weight: 80kDa, observed by reducing SDS-PAGE.

Formulation: Lyophilized after extensive dialysis against PBS.

Reconstitution: Reconstituted in ddH₂O at 100 μ g/mL.

Purity: > 95% by SDS-PAGE and HPLC analyses.

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

Storage: Lyophilized recombinant human Epidermal Growth Factor Receptor (rhEGFR) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhEGFR remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.