

Recombinant Human Epidermal Growth Factor Receptor/Receptor Tyrosine Protein Kinase ErbB1 Protein

Cat.NO.: TP05297

3th Edition

Synonyms:Epidermal growth factor receptor; EGFR; Proto-oncogene c-ErbB-1; Receptor tyrosine-protein kinase erbB-1; EGFR

Description:The EGFR subfamily of receptor tyrosine kinases is composed of EGFR, ErbB2, ErbB3 and ErbB4. The EGFR shares 43% - 44% aa sequence identity with the ECD of human EGFR subfamily. All these family members are type I transmembrane glycoproteins with an extracellular ligand binding domain. The extracellular ligand binding domain is containing two cysteine-rich domains separated by a spacer region and a cytoplasmic domain containing a membrane-proximal tyrosine kinase domain. Ligand binding could induce EGFR homodimerization and heterodimerization with ErbB2, resulting in cell signaling, heterodimerization tyrosine phosphorylation and kinase activation. It can bind EGF, amphiregulin, TGF-alpha, betacellulin, epiregulin, HB-EGF, epigen, and so on. Its signaling regulates multiple biological functions including cell proliferation, differentiation, motility, and apoptosis. EGFR can also be recruited to form heterodimers with the ligand-activated ErbB3 or ErbB4. EGFR is overexpressed in different tumors. Several anti-cancer drugs use EGFR as target.

Form:PBS

Molecular Weight:39.7 kDa

Sequences:Leu25-Val30Gly&Asn298-Ser645

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.