



Recombinant Protein Technical Manual

Recombinant Human EGFR/ErbB1 Protein (aa 25-30Gly&aa298-645, Fc Tag)(Active)
RPES3125

Product Data:

Product SKU: RPES3125

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P00533

Protein Information:

Molecular Mass: 65.8 kDa

AP Molecular Mass: 9020 kDa

Tag: C-Fc

Bio-activity: Immobilized Human EGF(Cat: PKSH033687) at 10µg/ml(100 µl/well) can bind Human HER1-His.

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

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

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

Immunogen Information:

Sequence: Leu25-Val30Gly&Asn298-Ser645

Background:

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.