Recombinant Protein Technical Manual

Recombinant Human EGFR/ErbB1 Protein (His Tag)(Active)

RPES3145

Product Data:

Product SKU: RPES3145

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P00533

Protein Information:

Molecular Mass:	69.6 kDa
AP Molecular Mass:	9020 kDa
Tag:	C-6His
Bio-activity:	Immobilized Human EGF(Cat: PKSH033687) at 10µg/ml(100 µl/well) can bind Human EGFR-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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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, pH7.4.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Functional ELISA
Synonyms:	Epidermal growth factor receptor;Proto-oncogene c-ErbB;Receptor tyrosine-protein kinase erbB; EGFR;ERBB; ERBB1; HER1

Immunogen Information:

Sequence: Leu25-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.