Recombinant Human EGFR/ErbB1 Protein (His Tag)

Catalog Number: PKSH033278

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

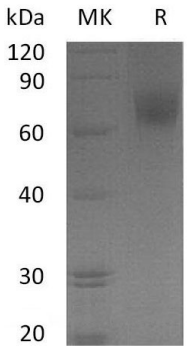
Description

Species	Human
Source	HEK293 Cells-derived Human EGFR/ErbB1 protein Leu25-Ser378, with an C-terminal His
Calculated MW	39.7 kDa
Observed MW	61-75 kDa
Accession	NP_001333870
Bio-activity	Loaded Anti-Human EGFR mAb on Protein A Biosensor, can bind Human EGFR vIII-His with an affinity constant of 2.55 nM as determined in BLI assay.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. 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, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

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.

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