

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

Catalog Number: PKSH033278

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

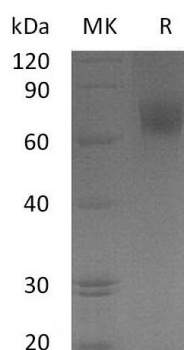
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human EGFR/ErbB1 protein Leu25-Ser378, with an C-terminal His
<b>Calculated MW</b>	39.7 kDa
<b>Observed MW</b>	61-75 kDa
<b>Accession</b>	NP_001333870
<b>Bio-activity</b>	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

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	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.