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

Catalog Number: PKSH033802



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

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Desc	PIN.	Inn
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 Species
 Human

 Mol\_Mass
 41.5 kDa

 Accession
 NP 001333870

**Bio-activity** Not validated for activity

#### **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

°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.

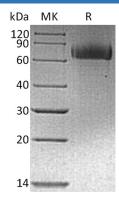
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

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.

### For Research Use Only