

# Recombinant Human HER1/ERBB1/EGFR Protein

Catalog No.: RP01029 Recombinant

## **Sequence Information**

Species Gene ID Swiss Prot Human 1956 P00533

# Tags

C-hFc&His

#### **Synonyms**

EGFR; ERBB; ERBB1; HER1; NISBD2; PIG61; mENA; epidermal growth factor receptor; ERBB; ERBB1; HER1; NISBD2; PIG6 1; mENA

### **Product Information**

**Source** Purification HEK293 cells ≥ 90 % as

determined by SDS-

PAGE.

Calculated MW Observed MW

97.64 kDa 125-145 kDa

#### **Endotoxin**

< 0.1 EU/ $\mu$ g of the protein by LAL method.

#### Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

#### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

#### Contact

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### **Background**

The EGFR (epidermal growth factor receptor) subfamily of receptor tyrosine kinases comprises four members: EGFR (also known as HER-1, ErbB1, or ErbB), ErbB2 (Neu, HER-2), ErbB3 (HER-3), and ErbB4 (HER-4). EGFR protein is type I transmembrane glycoprotein that binds a subset of EGF family ligands including EGF, amphiregulin, TGF- $\alpha$ , betacellulin, etc.The human EGFR cDNA encodes a 1210 amino acid (aa) precursor with a 24 aa signal peptide, a 621 aa extracellular domain (ECD), a 23 aa transmembrane segment, and a 542 aa cytoplasmic domain. EGFR signaling has been shown to exert action on carcinogenesis and disease progression, and thus EGFR protein is proposed as a target for cancer therapy currently, which is overexpressed in a wide variety of tumors and is the target of several anti-cancer drugs.

### **Basic Information**

#### **Description**

Recombinant Human HER1/ERBB1/EGFR Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Met1-Ser645) of human EGFR (Accession  $\#NP_005219.2$ .) fused with an Fc, 6×His tag at the C-terminus.

### **Bio-Activity**

Measured by its binding ability in a functional ELISA. Immobilized recombinant human EGF at 0.5  $\mu$ g/mL (100  $\mu$ L/well) can bind Rrecombinant human EGFR with a linear range of 0.3-2.5  $\mu$ g/mL.

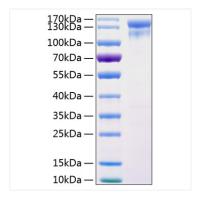
### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

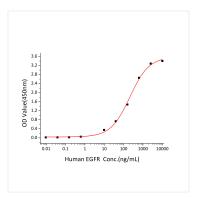
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

# **Validation Data**



Recombinant Human HER1/ERBB1/EGFR Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized Human EGF (Catalog: RP01556) at 10  $\mu$ g/mL (100  $\mu$ L/well) can bind Human EGFR(Catalog: RP01029) with a linear range of 0.6-209.9 ng/mL.