**Rat EGFR / HER1 / ErbB1 Protein (His Tag)**

**Catalog Number:** 80100-R08H

---

**General Information**

**Gene Name Synonym:**

EGFR

**Protein Construction:**

A DNA sequence encoding the rat EGFR (E7CXR8) (Met1-Ser646) was expressed, fused with a polyhistidine tag at the C-terminus.

**Source:** Rat

**Expression Host:** HEK293 Cells

**QC Testing**

**Purity:** > 98 % as determined by SDS-PAGE

**Bio Activity:**

1. Measured by its ability to bind recombinant human EGF-Fc (Cat:10605-H01H) in a functional ELISA. 2. Measured by its ability to bind recombinant mouse EGF-Fc (Cat:50482-M01H) in a functional ELISA.

**Endotoxin:**

**Stability:**

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Leu 25

**Molecular Mass:**

The recombinant rat EGFR comprises 633 amino acids and predicts a molecular mass of 70.7 kDa. The apparent molecular mass of the recombinant protein is approximately 93-110 kDa in SDS-PAGE under reducing conditions due to glycosylation.

**Formulation:**

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, manitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

**Usage Guide**

**Storage:**

Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

**Reconstitution:**

Detailed reconstitution instructions are sent along with the products.

---

**SDS-PAGE:**

![SDS-PAGE Image]

**Protein Description**

As a member of the epidermal growth factor receptor (EGFR) family, EGFR protein is type I transmembrane glycoprotein that binds a subset of EGF family ligands including EGF, amphiregulin, TGF-α, betacellulin, etc. EGFR protein plays a crucial role in signaling pathway in the regulation of cell proliferation, survival and differentiation. Binding of a ligand induces EGFR protein homo- or heterodimerization, the subsequent tyrosine autophosphorylation and initiates various downstream pathways (MAPK, PI3K/PKB and STAT). In addition, EGFR signaling also has been shown to exert action on carcinogenesis and disease progression, and thus EGFR protein is proposed as a target for cancer therapy currently.

**References**


Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

For US Customer: Fax: 267-657-0217 ● Tel: 215-583-7898

Global Customer: Fax: +86-10-5862-8288 ● Tel:+86-400-890-9989 ● [http://www.sinobiological.com](http://www.sinobiological.com)