

## Recombinant Protein Technical Manual

# Recombinant Human EGFR/ErbB1 Protein (Fc Tag)(Active) RPES1169

#### **Product Data:**

**Product SKU:** RPES1169 **Size:** 50μg

Species: Human Expression host: HEK293 Cells

**Uniprot: NP 005219** 

#### **Protein Information:**

Molecular Mass: 95 kDa

AP Molecular Mass: 13040 kDa

Tag: C-Fc

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized recombinant

human EGF at 10 μg/ml (100 μl/well) can bind human EGFR with a linear range of

0.64-400 ng/ml.

**Purity:** > 97 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per μg as determined by the LAL method.

**Storage:** 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 sterile PBS, pH 7.4

1. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the

hardcopy of COA.

2. Please contact us for any concerns or special

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** ERBB;ERBB1;HER1;mENA;NISBD2;PIG61



## Immunogen Information:

Sequence: Met 1-Gly 645

## **Background**:

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- $\alpha$ , 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 down stream 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.