



# Recombinant Protein Technical Manual

**Recombinant Human EGFR/ErbB1 Protein (aa 668210, His&GST Tag)(Active)**  
RPES2136

## Product Data:

**Product SKU:** RPES2136

**Size:** 20µg

**Species:** Human

**Expression host:** Baculovirus-Insect cells

**Uniprot:** NP\_005219

## Protein Information:

**Molecular Mass:** 89.1 kDa

**AP Molecular Mass:**

**Tag:** N-His-GST

**Bio-activity:** The specific activity was determined to be 105 nmol/min/mg using Poly(Glu:Tyr) 4:1 as substrate.

**Purity:** > 85 % as determined by reducing SDS-PAGE.

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

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, pH 7.4

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

**Application:**

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

## Immunogen Information:

**Sequence:** Met 668-Ala 1210

## 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.