# Human EGFR / HER1 / ErbB1 (aa 668-1210) Protein (His & GST Tag)

Catalog Number: 10001-H20B2



## **General Information**

#### Gene Name Synonym:

ERBB; ERBB1; HER1; mENA; NISBD2; PIG61

#### **Protein Construction:**

A DNA sequence encoding the cytoplasmic domain (Met 668-Ala 1210) of human EGFR (NP\_005219) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.

Source: Human

**Expression Host:** Baculovirus-Insect Cells

**QC** Testing

Purity: > 85 % as determined by SDS-PAGE

**Bio Activity:** 

The specific activity was determined to be > 70 nmol/min/mg using Poly(Glu:Tyr) 4:1 as substrate

#### **Endotoxin:**

< 1.0 EU per µg protein as determined by the LAL method.

#### Stability:

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

Predicted N terminal: Me

### **Molecular Mass:**

The recombinant human EGFR /GST chimera consists of 780 amino acids and has a calculated molecular mass of 89.1 kDa.

#### Formulation:

Supplied as sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol 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:

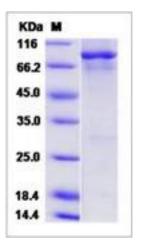
Store it under sterile conditions at  $-20^{\circ}$ C to  $-80^{\circ}$ C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

## Reconstitution:

Detailed reconstitution instructions are sent along with the products.

#### SDS-PAGE:



## **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 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.

#### References

1.Schlessinger, J. (2000) Cell signaling by receptor tyrosine kinases. Cell 103(2): 211-25. 2.Giaccone, G. (2005) HER1/EGFR-targeted agents: predicting the future for patients with unpredictable outcomes to therapy. Ann. Oncol. 16(4): 538-48. 3.Yarden, Y., *et al.* (2001) Untangling the ErbB signalling network. Nat. Rev. Mol. Cell. Biol. 2(2): 127-37.

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