

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

Catalog Number: 10001-H20B2



Sino Biological
Biological Solution Specialist

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: > 75 % as determined by SDS-PAGE

Bio Activity:

1. The specific activity was determined to be >70 nmol/min/mg using Poly(Glu:Tyr) 4:1 as substrate. 2. Immobilized EGF Protein, Human, Recombinant (ECD, hFc Tag)(Cat:10605-H01H) at 2 µg/mL (100 µL/well) can bind? EGFR Protein, Human, Recombinant (aa 668-1210, His & GST Tag)(Cat:10001-H20B2) in functional ELISA.

Endotoxin:

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

Predicted N terminal: Met

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

Stability & Storage:

Samples are stable for twelve months from date of receipt at -20°C to -80°C.

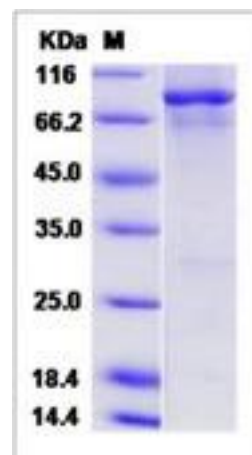
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



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

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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