Rhesus EGFR / HER1 / ErbB1 Protein (His Tag, ECD)

Catalog Number: **90317-K08H**

General Information

Gene Name Synonym:

EGFR

Protein Construction:

A DNA sequence encoding the rhesus EGFR (XP_001107305.1) (Met1-Ser645) was expressed with a polyhistidine tag at the C-terminus.

Source: Rhesus

Expression Host: HEK293 Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Bio Activity:

1. Immobilized EGF Protein, Human, Recombinant (ECD, hFc Tag)(Cat:10605-H01H) at 2 μg/mL (100 μL/well) can bind EGFR Protein, Rhesus, Recombinant (ECD, His Tag)(Cat:90317-K08H), the EC_{50}?is 30-110 ng/mL. 2. Immobilized Anti-EGFR(MK)-IgG1 Antibody (Cetuximab)(Cat:68069-H001) at 2 μg/mL (100 μL/well) can bind EGFR Protein, Rhesus, Recombinant (ECD, His Tag)(Cat:90317-K08H), the EC50?is 10-50 ng/mL.

Endotoxin:

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

Predicted N terminal: Leu 25

Molecular Mass:

The recombinant rhesus EGFR consists 632 amino acids and predicts a molecular mass of 70.1 kDa.

Formulation:

Lyophilized from sterile PBS, 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℃ to -80℃.

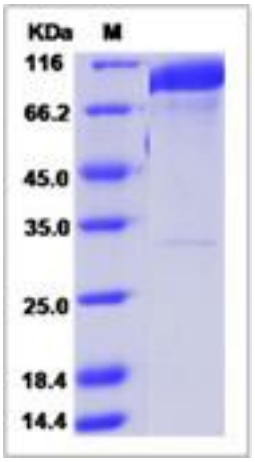
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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.