

Canine EGFR / HER1 / ErbB1 Protein (His Tag)

Catalog Number: 70026-D08B



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

EGFR

Protein Construction:

A DNA sequence encoding the canine EGFR (XP_533073.3) (Met1-Ser618) was expressed with a C-terminal polyhistidine tag.

Source: Canine

Expression Host: Baculovirus-Insect cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA. Immobilized canine EGFR-His at 10 µg/ml (100 µl/well) can bind biotinylated canine His-EGF(Cat:70013-D07E), The EC₅₀ of biotinylated canine His-EGF(Cat:70013-D07E) is 0.16-0.36µg/ml

Endotoxin:

< 1.0 EU per µg of the 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: Met

Molecular Mass:

The recombinant canine EGFR comprises 629 amino acids and has a predicted molecular mass of 69.8 kDa. The apparent molecular mass of the protein is approximately 87.2 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, pH 7.0.

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:

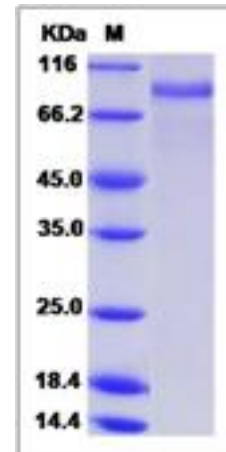
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 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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