Human EGFR / HER1 / ErbB1 Protein (His Tag)

Catalog Number: 10001-H08H

General Information

Gene Name Synonym:
ERBB; ERBB1; HER1; mENA; NISBD2; PIG61

Protein Construction:
A DNA sequence encoding the extracellular domain (Met 1-Ser 645) of human EGFR (NP_005219) was expressed with a C-terminal polyhistidine tag.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:
Measured by its binding ability in a functional ELISA. Immobilized human EGFR at 10 µg/ml can bind human EGF with a linear range of 3.2-400 ng/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: Leu 25

Molecular Mass:
The recombinant human EGF receptor consists of 630 amino acids and has a calculated molecular mass of 69.8 kDa. As a result of glycosylation, the recombinant protein migrates as an approximately 110 kDa protein in SDS-PAGE under reducing conditions.

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

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-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.

References