General Information

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

Protein Construction:
A DNA sequence encoding the human EGFR (NP_001333870.1) (Met1-Lys375) was expressed with the Fc region of human IgG1 at the C-terminus.

Source: Human
Expression Host: Baculovirus-Insect Cells

QC Testing
Purity: > 95 % as determined by SDS-PAGE.
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: Leu 25
Molecular Mass:
The recombinant human EGFR consists of 589 amino acids and predicts a molecular mass of 65.1 kDa.
Formulation:
Lyophilized from sterile 100 mM Glycine, 10 mM NaCl, 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.

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