General Information

Gene Name Synonym:
9030024J15Rik; Al552599; Erbb; Erbb1; Errp; wa-2; wa2; Wa5

Protein Construction:
A DNA sequence encoding the extracellular domain of mouse EGFR (Q01279) (Met 1-Ser 647) was fused with a polyhistidine tag at the C-terminus.

Source: Mouse
Expression Host: HEK293 Cells

QC Testing
Purity: > 95 % as determined by SDS-PAGE

Bio Activity:
1. Measured by its binding ability in a functional ELISA. 2. Immobilized mouse EGFR-his at 10 μg/mL (100 μl/well) can bind? human EGF-Fc (Cat:10605-H01H), The EC50 of human EGF-Fc (Cat:10605-H01H) is 60-90 ng/mL. 3. Immobilized mouse EGFR-his at 10 μg/mL (100 μl/well) can bind? mouse EGF-Fc (Cat:50482-M01H), The EC50 of mouse EGF-Fc (Cat:50482-M01H) is 70-100 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 secreted recombinant mouse EGFR comprises 634 amino acids and has a calculated molecular mass of 71 kDa. As a result of glycosylation, the apparent molecular mass of mEGFR is approximately 100 kDa 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.

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 plays a crucial role 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