Mouse EGFR / HER1 / ErbB1 Protein (Fc Tag)

Catalog Number: 51091-M02H

General Information

Gene Name Synonym:
9030024J15Rik; Al552599; Erbb; Errb1; Erre; wa-2; wa2; Wa5

Protein Construction:
A DNA sequence encoding the extracellular domain of mouse EGFR (Q01279) (Met 1-Ser 647) was fused with the Fc region of human IgG1 at the C-terminus.

Source: Mouse
Expression Host: HEK293 Cells

QC Testing
Purity: > 90% as determined by SDS-PAGE

Bio Activity:
**Measured by its ability to bind human EGF (Cat:10605-HNAE) in a functional ELISA.**

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/Fc is a disulfide-linked homodimer. The reduced monomer comprises 864 amino acids and has a calculated molecular mass of 96 kDa. As a result of glycosylation, the apparent molecular mass of rmEGFR/Fc monomer is approximately 130 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.

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 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