

Mouse EGF / Epidermal Growth Factor Protein (Fc Tag)

Catalog Number: 50482-M01H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

AI790464

Protein Construction:

A DNA sequence encoding the mature form of mouse EGF (P01132) (Asn 977-Arg 1029) was fused with the Fc region of human IgG1 at the N-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > (67.3+30.0) % as determined by SDS-PAGE

Bio-Activity

Measured in a cell proliferation assay using Balb/3T3 mouse embryonic fibroblasts. The ED50 for this effect is typically 0.2-1 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: Glu

Molecular Mass:

The recombinant mouse EGF/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 314 amino acids and has a predicted molecular mass of 34.5 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of the protein is approximately 44 and 38 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose and mannitol are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

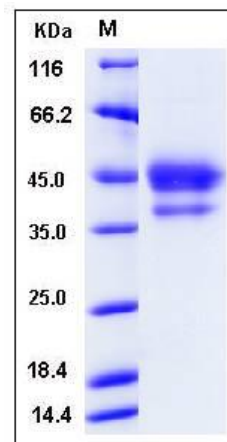
Usage Guide

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.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Epidermal growth factor (EGF) exerts actions on a wide variety of biological processes, and plays an important role in the regulation of cell growth, proliferation, and differentiation mediated by its high-affinity receptor EGFR on the cell surface. It induces differentiation of specific cells, promotes angiogenesis, and inhibits gastric acid secretion in vivo, while serves as a potent mitogenic actor for a variety of cultured cells of both ectodermal and mesodermal origin. Human EGF was originally isolated from urine based on its inhibitory effect on gastric secretion and named urogastrone accordingly. EGF is the founding member of the EGF-family of proteins which are characterized by the presence of at least one EGF structural unit (a conserved 6 cysteine motif that forms three disulfide bonds). The EGF precursor is believed to exist as a membrane-bound molecule containing 9 EGF units, and is proteolytically cleaved to generate the 53-amino acid peptide hormone.

References

1. Carpenter, G and Cohen, S. 1990. J. Biol. Chem. 265: 7709-7712.
2. Hommel, U. et al., 1992, J. Mol. Biol. 227: 271-282.
3. Goodsell, D.S. et al., 2003, Stem Cells. 21: 702-703.

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Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>