

Glia Maturation Factor Beta, rat recombinant (rrGMF-b)

Catalog No: 97463 Lot No: XXXXX Source: *E. coli*

Synonyms: Glia maturation factor beta, GMFB, GMF-B, GMF-beta, GMF, C79176, Al851627, D14Ertd630e,

3110001H22Rik, 3110001O16Rik

Background

GMFB is part of the GMF subfamily of the larger actin-binding protein ADF family. GMFB is phosphorylated after phorbol ester stimulation, and is crucial for the nervous system. GMFB causes brain cell differentiation, stimulates neural regeneration and inhibits tumor cell proliferation. GMFB overexpression in astrocytes results in the increase of BDNF production. GMFB expression is increased by exercise, thus BDNF is important for exercise-induction of BDNF.

Description

Glia Maturation Factor-Beta (GMF-Beta) rat recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 141 amino acids and having a total molecular mass of 16.6 kDa. GMF-Beta is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2 µm filtered concentrated (1.0 mg/ml) solution in 1xPBS, pH 7.4.

Solubility

It is recommended to reconstitute the lyophilized GMFB in sterile 18 $M\Omega$ -cm H_2O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized GMFB, although stable at room temperature for 3 weeks, should be stored desiccated below -18C. Upon reconstitution GMFB should be stored at 4C between 2-7 days and for future use below -18C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

SESLVVCDVA EDLVEKLRKF RFRKETHNAA IIMKIDKDKR LVVLDEELEG VSPDELKDEL PERQPRFIVY SYKYQHDDGR VSYPLCFIFS SPLGCKPEQO MMYAGSKNKL VOTAELTKVF EIRNTEDLTE EWLREKLGFF H

Usage

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