## **PRODUCT INFORMATION**

Expression system E.coli

**Domain** 1-142aa

**UniProt No.** P60983

NCBI Accession No. NP\_004115

Alternative Names Glia maturation factor beta, GMF, GMF beta, Glia maturation factor beta

# **PRODUCT SPECIFICATION**

Molecular Weight 18.8 kDa (162aa) confirmed by MALDI-TOF

**Concentration** 1mg/ml (determined by Bradford assay)

Formulation Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 1mM DTT, 10% glycerol

**Purity** > 95% by SDS-PAGE

**Tag** His-Tag

Application SDS-PAGE

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

#### Description

GMFB, also known as GMF, belongs to the GMF subfamily of the larger actin-binding protein ADF family. This protein, which is phosphorylated following phorbol ester stimulation, is important for the nervous system. It causes brain cell differentiation, stimulates neural regeneration and inhibits tumor cell proliferation. Overexpression of GMFB in astrocytes has been shown to enhance brain-derived neurotrohic factor (BDNF) production. GMFB expression is increased by exercise, and the protein is crucial for exercise-induction of BDNF. Recombinant human GMFB protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using



conventional chromatography techniques.

#### **Amino acid Sequence**

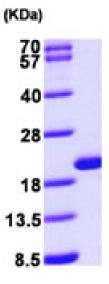
MGSSHHHHHH SSGLVPRGSH MSESLVVCDV AEDLVEKLRK FRFRKETNNA AIIMKIDKDK RLVVLDEELE GISPDELKDE LPERQPRFIV YSYKYQHDDG RVSYPLCFIF SSPVGCKPEQ QMMYAGSKNK LVQTAELTKV FEIRNTEDLT EEWLREKLGF FH

#### **General References**

Li YL., et al. (2010) Eur J Cancer. 46(11):2104-18. Wada T., et al. (2009) Int J Oncol. 35(5):973-6.

### DATA





3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)