

## GMF- $\beta$ , Human

**Cat. No.:** Z03200-1

**Size:** 1.0 mg

**Synonyms:** GMFB

### Description:

Glia Maturation Factor beta (GMF-beta) is a 17 kDa brain specific protein that belongs to the ADF/cofilin superfamily. It is a neurotrophin that induces maturation of neurons and glial cells. Unlike other neurotrophins, GMF- $\beta$  lacks a leader sequence and can be phosphorylated by protein kinase A and protein kinase C suggesting its role in signal transduction. GMF- $\beta$  is a prominent mediator of inflammation in the central nervous system and can activate several inflammation-related genes such as tumor necrosis factor- $\alpha$  and interleukin-1 $\beta$ . Researchers have shown there are significantly higher levels of GMF- $\beta$  protein in all the effected regions of Alzheimer's disease (AD) brains suggesting an important role of GMF- $\beta$  in AD pathogenesis

Recombinant human Glia Maturation Factor beta (rhGMF-beta) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 142 amino acids. rhGMF-beta has a molecular mass of 16.7kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

### Amino Acid Sequence:

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00001 MSELVVCDV AEDLVEKLRK FRFRKETNNA AIIMKIDKDK
00041 RLVVLDEELE GISPDELKDE LPERQPRFIV YSYKYQHDDG
00081 RVSYP LCFIF SSPVGCKPEQ QMMYAGSKNK LVQTAELTKV
00121 FEIRNTEDLT EEWLREKLG F H
```

**Source:** *E. coli*

**Species:** Human

**Biological Activity:** Bioassay data are not available.

**Molecular Weight:** 16.7 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O at 100  $\mu$ g/mL.

**Purity:** > 95% by SDS-PAGE and HPLC analyses.

**Endotoxin Level:** < 0.2 EU/ $\mu$ g, determined by LAL method.

**Storage:** Lyophilized recombinant human Glia Maturation Factor beta (rhGMF-beta) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhGMF-beta remains stable up to 2 weeks at 4°C or up to 3 months at -20°C.