

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant GMF- $\beta$ , Human

Catalog Number: BK0068-50 $\mu$ g

Source: Escherichia coli.

Quantity: 50 $\mu$ g

### 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.

### Molecular Weight:

16.7 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% by SDS-PAGE and HPLC analyses.

### Biological Activity:

Bioassay data are not available.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) pow-

der.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

MSESLVVCDVAEDLVEKLRKFRFR-  
KETNNAAIIM-  
KIDKDKRLVVLDEELEGISPDELKDELP-  
ERQPRFIVYSYKYQHDDGRVSY-  
PLCFIFSSPVGCKPEQMMYAG-  
SKNKLVQTAELTKVFEIRNTEDLTEEWL-  
REKLGFFH

### Endotoxin:

< 0.2 EU/ $\mu$ g, determined by LAL method.

### Reconstitution:

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

### Storage:

Lyophilized recombinant human Glia Maturation Factor beta (rhGMF-beta) remains stable up to 6 months at -80  $^{\circ}$ C from date of receipt. Upon reconstitution, rhGMF-beta remains stable up to 2 weeks at 4  $^{\circ}$ C or up to 3 months at -20  $^{\circ}$ C.

### Usage:

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