

Rev03  
 Update: Dec,14,2021

## DATASHEET

# GMF- $\beta$ , Human

Cat. No.: Z03200

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	GMF- $\beta$ (Met1-His142) Accession # P60983
<b>Purity</b>	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
<b>Endotoxin Level</b>	< 0.2 EU/ $\mu$ g of protein by gel clotting method
<b>Expression System</b>	E. coli
<b>Apparent Molecular Weight</b>	~16.7 kDa, on SDS-PAGE under reducing conditions.
<b>Formulation</b>	Lyophilized after extensive dialysis against PBS.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O up to 100 $\mu$ g/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## Background

**Target Background :** 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.

**Synonyms :** GMFB

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**