

**GMF-beta, human recombinant protein**  
**Glia maturation factor beta, GMFB, GMF-B, GMF-beta, GMF**  
**Catalog # PBV10463r**

## Specification

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### GMF-beta, human recombinant protein - Product info

Primary Accession [P60983](#)  
Calculated MW **17.0 kDa** KDa

### GMF-beta, human recombinant protein - Additional Info

Gene ID	<b>2764</b>
Gene Symbol	<b>GMFB</b>
<b>Other Names</b>	
Glia maturation factor beta, GMFB, GMF-B, GMF-beta, GMF	
Gene Source	<b>Human</b>
Source	<b>E. coli</b>
Assay&Purity	<b>SDS-PAGE; ≥98%</b>
Assay2&Purity2	<b>HPLC; ≥98%</b>
Recombinant	<b>Yes</b>
Sequence	<b>SESLVVCDVAEDLVEKLRKFRFRKETNNAAIIM KIDKDKRLVVLDEELEGISPDELKELPERQPRFI VYSYKYQHDDGRVSYPLCFIFSSPVGCKPEQQ MMYAGSKNKLQTAELTKVFEIRNTEDLTEEWL REKLGFFH.</b>

### Application Notes

Centrifuge the vial prior to opening. Reconstitute in sterile H<sub>2</sub>O to a concentration ≥ 100 µg/ml.  
This solution can then be diluted into other aqueous buffers.

### Format

Lyophilized protein

### Storage

-20°C; Lyophilized after dialysis against 20 mM PBS pH 7.4 and 130 mM NaCl.

### GMF-beta, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**GMF-beta, human recombinant protein - Images****GMF-beta, human recombinant protein - Background**

Glia Maturation Factor-Beta (GMF-Beta) is a 17 kDa protein nerve growth factor identified as a growth and differentiation factor in the vertebrate brain. Glia Maturation Factor-Beta stimulates differentiation of normal neurons as well as glial cells. GMFB inhibits the proliferation of the N-18 neuroblastoma line and the C6 glioma line while promoting their phenotypic expression. GMF-beta enhances the phenotypic expression of glia & neurons thus inhibits the proliferation of their respective tumors when added to cell culture. Cell- surface GMF-Beta acts on the target cells at close range when cells are in direct contact. GMF-Beta is produced by thymic epithelial cells and plays an important role in T cell development in favor of CD4+ T cells. GMF-Beta is a brain-specific protein which belongs to the actin-binding proteins (ADF) family. GMF-beta appears to play a role in the differentiation, maintenance, and regeneration of the nervous system. It also supports the progression of certain auto-immune diseases, possibly through its ability to induce the production and secretion of various pro-inflammatory cytokines.

**GMF-beta, human recombinant protein - References**

Kaplan R., et al. J. Neurochem. 57:483-490(1991).  
Saito T., et al. Submitted (FEB-1997) to the EMBL/GenBank/DDBJ databases.  
Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.  
Halleck A., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.  
Ota T., et al. Nat. Genet. 36:40-45(2004).