10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GMF-beta, human recombinant protein

Glia maturation factor beta, GMFB, GMF-B, GMF-beta, GMF
Catalog # PBV10463r

Specification

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	**2764**
Gene Symbol	**GMFB**

Other Names
Glia maturation factor beta, GMFB, GMF-B, GMF-beta, GMF

Gene Source	**Human**
Source	**E. coli**
Assay&Purity	**SDS-PAGE; ≥98%**
Assay2&Purity2	**HPLC; ≥98%**
Recombinant	**Yes**
Sequence	**SESLVVCDVAEDLVEKLRKFRFRKETNNAAIIM KIDKDKRLVVLDEELEGISPDELKELPERQPRFI VYSYKYQHDDGRVSYPLCFIFSSPVGCKPEQQ MMYAGSKNKLVQTAELTKVFEIRNTEDLTEEWL REKLGFFH.**

Application Notes
Centrifuge the vial prior to opening. Reconstitute in sterile H_2O 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 Cytomety
- Cell Culture

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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).