

32-1293: GMF b Recombinant Protein

Alternative Name : Glia maturation factor beta,GMFB,GMF-B,GMF-beta,GMF.

Description

Source : Escherichia Coli. Glia Maturation Factor-Beta (GMF-Beta) Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 141 amino acids and having a total molecular mass of 16.5 kDa. Glia Maturation Factor-Beta, GMF-Beta, Human Recombinant is purified by proprietary chromatographic techniques. 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. Although astrocytes produce GMF-b and store it inside the cells, they don't secrete the GMF-B into the cultured medium. Cell-surface GMFb 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.

Product Info

Amount :	10 µg
Purification :	Greater than 98.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Content :	The GMF-beta protein was lyophilized after dialysis against 20mM PBS pH=7.4 and 130mM NaCl.
Storage condition :	Lyophilized GMF-B although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GMF-beta should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.
Amino Acid :	SESLVVCDVAEDLVEKLRKFRFRKETNNAIIMKIDKDKRLVVLDEELEGISPDELKELPERQPRFIVYSYKYQHD DGRVSYPLCFIFSSPVGCKPEQQMMYAGSKNKLVT AELTKVFEIRNTEDLTEEWLREKLGFFH.

Application Note

It is recommended to reconstitute the lyophilized GMFB in sterile 18MΩ·cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.