Data Sheet (Cat.No.TMPJ-00024)

TargetMol

GMF beta/GMFB Protein, Human, Recombinant (His)

General Information

Synonyms: GMF-β;GMF-beta;GMFB;Glia maturation factor beta;Glia maturation factor β

Protein Construction: Met1-His142

Species: Human

Expression Host: E. coli

Accession: P60983

Molecular Weight: 18 KDa (reducing condition)

AA Sequence: Met1-His142

QC Testing

Biological Activity: Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.

Purity: Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Endotoxin: < 0.1 ng/μg (1 EU/μg) as determined by LAL test.

Formulation: Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris-HCl, 200 mM NaCl, pH 8.0.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Glia maturation factor beta (GMFB) contains a ADF-H domain, which is a member of the actin-binding proteins ADF family, GMF subfamily. It is a nerve growth factor implicated in nervous system development, angiogenesis and immune function. GMFB causes differentiation of brain cells, stimulation of neural regeneration, and inhibition of proliferation of tumor cells. It is phosphorylated after phorbol ester stimulation, and is crucial for the nervous system. GMFB overexpression in astrocytes results in the increase of BDNF production. GMFB expression is

increased by exercise, thus BDNF is important for exercise-induction of BDNF.