Recombinant human Myelin Basic Protein/MBP protein

Catalog Number: ATGP2348

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-197aa

UniProt No.
P02686

NCBI Accession No.
NP_001020271.1

Alternative Names
myelin basic protein

PRODUCT SPECIFICATION

Molecular Weight
23.9 kDa (220aa) confirmed by MALDI-TOF

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 10% glycerol,

Purity
> 85% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
MBP is a major constituent of the myelin sheath of oligodendrocytes and Schwann cells in the nervous system. However, MBP-related transcripts are also present in the bone marrow and the immune system. These mRNAs arise from the long MBP gene (otherwise called 'Golli-MBP') that contains 3 additional exons located upstream of the classic MBP exons. Alternative splicing from the Golli and the MBP transcription start sites gives rise to 2 sets of MBP-related transcripts and gene products. The Golli mRNAs contain 3 exons unique to Golli-MBP, spliced in-frame to 1 or more MBP exons. They encode hybrid proteins that have N-terminal Golli aa sequence linked to

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MBP aa sequence. The second family of transcripts contain only MBP exons and produce the well characterized myelin basic proteins. This complex gene structure is conserved among species suggesting that the MBP transcription unit is an integral part of the Golli transcription unit and that this arrangement is important for the function and/or regulation of these genes. Recombinant human MBP protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

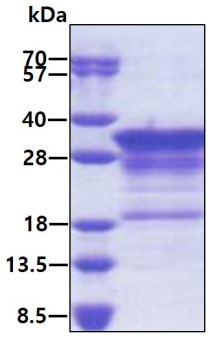
<MGSSHHHHHH SSGLVPRGSH MGS>MGNHAGK RELNAEKAST NSETNRGESE KKRNLGELSR TTSEDNEVFG EADANQNNGT SSQDTAVTDS KRTADPKNAW QDAHPADPGS RPHLIRLFSR DAPGREDNTF KDRPSESDEL QTIQEDSAAT SESLDVMASQ KRPSQRHGSK YLATASTMDH ARHGFLPRHR DTGILDSIGR FFGGDRGAPK RGSGKVSSEE

General References

Nye S.H., et al (1995). Mol. Immunol. 32:1131-1141
Pribyl T.M., et al (1993). Proc. Natl. Acad. Sci. u.S.A. 90:10695-10699

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.