

Product datasheet for PH309071

OriGene Technologies, Inc.

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Myelin Basic Protein (MBP) (NM 001025100) Human Mass Spec Standard

Product data:

Product Type: Mass Spec Standards

Description: MBP MS Standard C13 and N15-labeled recombinant protein (NP 001020271)

Species: Human **HEK293 Expression Host: Expression cDNA Clone**

or AA Sequence:

RC209071

Predicted MW: 21.5 kDa

>RC209071 protein sequence **Protein Sequence:**

Red=Cloning site Green=Tags(s)

MGNHAGKRELNAEKASTNSETNRGESEKKRNLGELSRTTSEDNEVFGEADANQNNGTSSQDTAVTDSKRT ADPKNAWQDAHPADPGSRPHLIRLFSRDAPGREDNTFKDRPSESDELQTIQEDSAATSESLDVMASQKRP

SQRHGSKYLATASTMDHARHGFLPRHRDTGILDSIGRFFGGDRGAPKRGSGKVSSEE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration: >0.05 µg/µL as determined by microplate BCA method

Labeling Method: Labeled with [U-13C6, 15N4]-L-Arginine and [U-13C6, 15N2]-L-Lysine

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Store at -80°C. Avoid repeated freeze-thaw cycles. Storage:

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 001020271

RefSeg Size: 4889 RefSeq ORF: 591 Locus ID: 4155 **UniProt ID:** P02686 Cytogenetics: 18q23

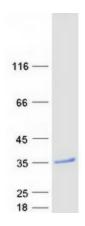




Summary:

The protein encoded by the classic MBP gene 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 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. [provided by RefSeq, Jul 2008]

Product images:



Coomassie blue staining of purified MBP protein (Cat# [TP309071]). The protein was produced from HEK293T cells transfected with MBP cDNA clone (Cat# [RC209071]) using MegaTran 2.0 (Cat# [TT210002]).