HUMAN MBP PROTEIN, HFC TAG

Cat.#: 12020

Product Name: Human MBP Protein

Size : 10 μg, 50 μg and 100 μg

Synonyms: Myelin A1 protein;Myelin membrane encephalitogenic protein

Target: MBP

UNIPROT ID: P02686

Description: Recombinant human MBP Protein with N-terminal Human Fc tag

Background: 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]

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 59.3 kDa after removal of the signal peptide. The apparent molecular mass of hFc-MBP is approximately 70-100 kDa due to glycosylation.

Molecular Characterization: hFc(Glu99-Ala330) MBP(Met1-Arg304)

Purity: The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC APPLICATIONS

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

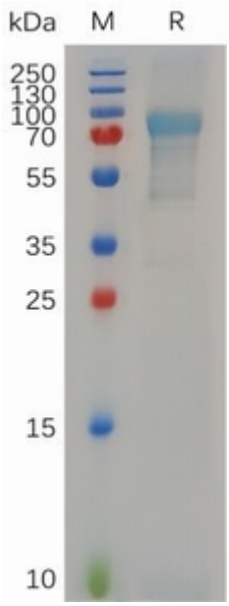

Figure 1. Human MBP, hFc Tag on SDS-PAGE under reducing condition.