

Myelin Basic Protein rabbit-FC recombinant protein

Catalog No :	YD3129
Reactivity :	Human;
Purity :	>90% as determined by SDS-PAGE
Gene Name :	Myelin Basic Protein
Protein Name :	Myelin basic protein (MBP) (Myelin A1 protein) (Myelin membrane encephalitogenic protein)
Sequence :	Amino acid:1-171,with rabbit FC tag.
Human Gene Id :	4155
Human Swiss Prot No :	P02686
Formulation :	Phosphate-buffered solution
Source :	Mammalian cells
Storage Stability :	-15°C to -25°C/1 year(Avoid freeze / thaw cycles)
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 as sequence linked to MBP as 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
Function :	alternative products:Additional isoforms seem to exist,developmental stage:Expression begins abruptly in 14-16 week old fetuses. Even smaller isoforms seem to be produced during embryogenesis; some of these persisting in the adult. Expression of isoform MBP2 is more evident at 16 weeks and its



relative proportion declines thereafter.,disease:The reduction in the surface charge of citrullinated and/or methylated MBP could result in a weakened attachment to the myelin membrane. This mechanism could be operative in demyelinating diseases such as chronical multiple sclerosis (MS), and fulminating MS (Marburg disease).,function:The classic group of MBP isoforms (isoform 4-isoform 14) are with PLP the most abundant protein components of the myelin membrane in the CNS. They have a role in both its formation and stabilization. The smaller isoforms might have an important role in remyelination of

Subcellular Location :	Cytoplasmic
Expression :	MBP isoforms are found in both the central and the peripheral nervous system, whereas Golli-MBP isoforms are expressed in fetal thymus, spleen and spinal
	cord, as well as in cell lines derived from the immune system.

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