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Datasheet for ABIN3322617 Human MBP cDNA Clone in Ma

Human MBP cDNA Clone in Mammalian Expression Vector (Myc-DYKDDDDK Tag)

Overview

Quantity:	10 µg
Gene:	MBP
Species:	Human
Insert:	cDNA
Vector:	Mammalian Expression Vector
Application:	Protein Expression (PExp)

Product Details

Purpose:	Untagged full-length cDNA clone from Human MBP is ideal for over-expression of native protein
	for functional studies.
Brand:	TrueClones®
Vector Backbone:	pCMV6-Entry
Promoter:	Enhanced CMV Promoter
Selectable Marker:	Neomycin
Bacterial Resistance:	Kanamycin
Expression Type:	Transient
Specificity:	With the native stop codon at the end of the ORF the C-terminal Myc-DDK tag in the vector
	won't be expressed.
Characteristics:	 These cDNA clones are isolated from full-length cDNA libraries and usually contain the coding sequence as well as the untranslated regions (UTRs) of the mRNA transcript appropriate to the library from which they were isolated. These cDNA clones are ideal for over-expression of native proteins for functional studies. Provided as 10 µg transfection-ready plasmids.

Product Details

	• Every lot of primer is tested to provide clean sequencing of cDNA clones.
Purification:	The DNAs were purified using PowerPrep HP Plasmid isolation kits for transfection ready plasmids.
Sequencing Primer:	VP1.5 (forward) 5'GGACTTTCCAAAATGTCG 3', XL39 (reverse) 5'ATTAGGACAAGGCTGGTGGG 3'
Components:	 The cDNA clone is shipped in a 2-D bar-coded Matrix tube as dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.

Target Details

Gene:	MBP
Alternative Name:	Myelin basic protein (MBP Products)
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].Transcript Variant: This variant (4) lacks exons 2 and 5 compared to transcript variant 1 and encodes one of the classic MBP isoforms (4) that is missing a 26 aa and a 11 aa segment compared to isoform 1.

NCBI Accession:

NM_001025092, NP_001020263

Application Details

Restrictions:

For Research Use only

Handling

Format:	Lyophilized
Storage:	RT,-20 °C
Storage Comment:	The lyophilized plasmid is stable for up to one year when stored at ambient temperature. Following dissolution in 100 μ L dH2O, store at -20 °C. Lyophilized primers are stable for up to one year when stored at ambient temperature. Following dissolution in 10 μ L dH2O, store at -20 °C.
Expiry Date:	12 months
Publications	
Product cited in:	Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (1991)