Datasheet for ABIN5356958

Rat MBP ORF Clone in Mammalian Expression Vector (Myc-DYKDDDDK Tag)

Overview

Quantity:	10 µg
Gene:	MBP
Species:	Rat
Fusion tag:	Myc-DYKDDDDK Tag
Insert:	ORF
Vector:	Mammalian Expression Vector
Application:	Protein Expression (PExp)

Product Details

Purpose:	Mammalian Vector with ORF clone of Rat myelin basic protein (Mbp) transcript variant 5
Brand:	TrueORF
Insert Length:	387 bp
Vector Backbone:	pCMV6-Entry
Promoter:	CMV Promoter
Bacterial Resistance:	Kanamycin
Expression Type:	Transient
Specificity:	Restriction Site: SgfI-MluI
Sequencing Primer:	VP1.5 (forward) 5'GGACTTTCCAAAATGTCG 3', XL39 (reverse) 5'ATTAGGACAAGGCTGGTGGG 3'
Grade:	End-sequenced
Components:	The ORF clone is ion-exchange column purified, transfection-ready dried plasmid DNA, and shipped with 2 vector sequencing primers.

Target Details

Gene:	MBP
Abstract:	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. Mutation of the Mbp gene is associated with the 'shiverer' and 'myelin deficient' phenotypes in mouse.
NCBI Accession:	NM_017026, NP_058722

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Storage:	4 °C/-20 °C

Publications

Product cited in:	Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (1991)