

Product datasheet for MR227434

434

Mbp (NM_001025259) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Mbp (NM_001025259) Mouse Tagged ORF Clone

Tag: Myc-DDK

Symbol: Mbp

Synonyms: C76307; goll; golli-mbp; Hmb; Hmbpr; jv; jve; mld; R75289; shi

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >MR227434 representing NM_001025259
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

AGACAGCCGCTCTGGATCTCCCATGGCGAGACGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR227434 representing NM_001025259

Red=Cloning site Green=Tags(s)

MASQKRPSQRSKYLATASTMDHARHGFLPRHRDTGILDSIGRFFSGDRGAPKRGSGKDSHTRTTHYGSLP

QKSQHGRTQDENPVVHFFKNIVTPRTPPPSQGKGRGLSLSRFSWGGRDSRSGSPMARR

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Restriction Sites: Sgfl-Mlul



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

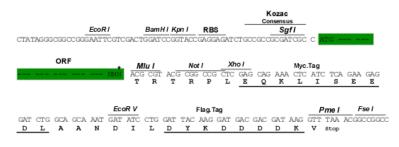
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



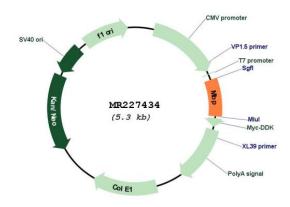
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001025259

ORF Size: 384 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

ORIGENE

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001025259.2</u>, <u>NP 001020430.1</u>

 RefSeq Size:
 1985 bp

 RefSeq ORF:
 387 bp

 Locus ID:
 17196

 UniProt ID:
 P04370

 Cotto reporting:
 18,55,84

Cytogenetics: 18 55.84 cM MW: 14.7 kDa

Gene 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. Mutation of the Mbp gene is associated with the 'shiverer' and 'myelin deficient' phenotypes

in mouse. [provided by RefSeq, Jul 2008]