

## Product datasheet for MR201904L4V

### OriGene Technologies, Inc.

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# Mbp (NM\_001025245) Mouse Tagged ORF Clone Lentiviral Particle

### **Product data:**

**Product Type:** Lentiviral Particles

**Product Name:** Mbp (NM\_001025245) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Mbp

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

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_001025245

ORF Size: 588 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(MR201904).

Sequence:

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

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

varies depending on the nature of the gene.

**RefSeq:** NM 001025245.1, NP 001020416.1

 RefSeq Size:
 4820 bp

 RefSeq ORF:
 588 bp

 Locus ID:
 17196

 UniProt ID:
 P04370

Cytogenetics: 18 55.84 cM







### **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]