

## Product datasheet for **TL311555**

### Myelin Basic Protein (MBP) Human shRNA Plasmid Kit (Locus ID 4155)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Myelin Basic Protein (MBP) Human shRNA Plasmid Kit (Locus ID 4155)
Locus ID:	4155
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	MBP - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 4155). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<a href="#">NM_001025081</a> , <a href="#">NM_001025090</a> , <a href="#">NM_001025092</a> , <a href="#">NM_001025094</a> , <a href="#">NM_001025098</a> , <a href="#">NM_001025100</a> , <a href="#">NM_001025101</a> , <a href="#">NM_002385</a> , <a href="#">NM_001025090.1</a> , <a href="#">NM_001025100.1</a> , <a href="#">NM_001025092.1</a> , <a href="#">NM_001025081.1</a> , <a href="#">NM_001025101.1</a> , <a href="#">NM_002385.1</a> , <a href="#">NM_002385.2</a> , <a href="#">NM_001025094.1</a> , <a href="#">NM_001025098.1</a> , <a href="#">BC008749</a> , <a href="#">BC008749.2</a> , <a href="#">BC065248</a> , <a href="#">BC065248.1</a> , <a href="#">BC080654</a> , <a href="#">BC080654.1</a> , <a href="#">BC030093</a> , <a href="#">BC068550</a> , <a href="#">BC101771</a> , <a href="#">BC101773</a> , <a href="#">BC130034</a> , <a href="#">BC143348</a> , <a href="#">BC143350</a> , <a href="#">BM977768</a> , <a href="#">NM_002385.3</a> , <a href="#">NM_001025081.2</a> , <a href="#">NM_001025101.2</a> , <a href="#">NM_001025100.2</a> , <a href="#">NM_001025090.2</a> , <a href="#">NM_001025092.2</a>
UniProt ID:	<a href="#">P02686</a>



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**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. [provided by RefSeq, Jul 2008]

**shRNA Design:**

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

**Performance Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).