

Product datasheet for TL515683

OriGene Technologies, Inc.

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Myt1l Mouse shRNA Plasmid (Locus ID 17933)

Product data:

Product Type: shRNA Plasmids

Product Name: Myt1l Mouse shRNA Plasmid (Locus ID 17933)

Locus ID: 17933

Synonyms: 2900046C06Rik; 2900093J19Rik; C630034G21Rik; mKIAA1106; Nztf1; Pmng1; Png-1

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell

Puromycin

Selection: Format:

Lentiviral plasmids

Components: Myt1l - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 17933).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: <u>BC094438</u>, <u>BC131677</u>, <u>NM 001093775</u>, <u>NM 001093776</u>, <u>NM 001093778</u>, <u>NM 008666</u>,

NM 008666.1, NM 008666.2, NM 008666.3, NM 001093776.1, NM 001093775.1,

NM 001093778.1, BC056457, BC079651, NM 001361655, NM 001361656, NM 001361657,

NM 001361658, NM 001361659, NM 001361660

UniProt ID: P97500

Summary: Transcription factor that plays a key role in neuronal differentiation by specifically repressing

expression of non-neuronal genes during neuron differentiation (PubMed:28379941). In contrast to other transcription repressors that inhibit specific lineages, mediates repression of multiple differentiation programs (PubMed:28379941). Also represses expression of negative regulators of neurogenesis, such as members of the Notch signaling pathway, including HES1 (PubMed:28379941). The combination of three transcription factors, ASCL1, POU3F2/BRN2 and MYT1L, is sufficient to reprogram fibroblasts and other somatic cells into

induced neuronal (iN) cells in vitro (PubMed:20107439, PubMed:24243019,

PubMed:27281220). Directly binds the 5'-AAGTT-3' core motif present on the promoter of target genes and represses transcription by recruiting a multiprotein complex containing SIN3B (PubMed:28379941). The 5'-AAGTT-3' core motif is absent from the promoter of neural

genes (PubMed:28379941).[UniProtKB/Swiss-Prot Function]







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. 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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).