

Product datasheet for TL501303V

OriGene Technologies, Inc.

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Ascl1 Mouse shRNA Lentiviral Particle (Locus ID 17172)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Ascl1 Mouse shRNA Lentiviral Particle (Locus ID 17172)

Locus ID: 17172

Synonyms: Al225900; ASH1; bHLHa46; Mash1

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: Ascl1 - Mouse shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: <u>BC055748, NM 008553, NM 008553.1, NM 008553.2, NM 008553.3, NM 008553.4,</u>

NM 008553.5

UniProt ID: Q02067

Summary: Transcription factor that plays a key role in neuronal differentiation: acts as a pioneer

transcription factor, accessing closed chromatin to allow other factors to bind and activate neural pathways (PubMed:24243019). Directly binds the E box motif (5'-CANNTG-3') on

promoters and promotes transcription of neuronal genes (PubMed:20107439,

PubMed:24243019, PubMed:27281220). 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). Plays a role at early stages of development of specific neural lineages in most regions of the CNS, and of several lineages in the PNS (PubMed:8217843). Essential for the generation of olfactory and autonomic neurons (PubMed:8221886). Acts synergistically with FOXN4 to specify the identity of V2b neurons rather than V2a from bipotential p2 progenitors during spinal cord neurogenesis, probably through DLL4-NOTCH signaling activation (PubMed:16020526, PubMed:17728344).[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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





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).