

Product datasheet for **MR227072L2V**

Ascl1 (NM_008553) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Ascl1 (NM_008553) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Ascl1
Synonyms:	AI225900; ASH1; bHLHa46; Mash1
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_008553
ORF Size:	693 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR227072).
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_008553.4
RefSeq Size:	2259 bp
RefSeq ORF:	696 bp
Locus ID:	17172
UniProt ID:	Q02067
Cytogenetics:	10 C1



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Gene 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]