

## Product datasheet for MC208938

### Ascl1 (NM\_008553) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ascl1 (NM_008553) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ascl1
Synonyms:	AI225900; ASH1; bHLHa46; Mash1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC208938 representing NM_008553 Red=Cloning site Blue=ORF

TTTGTATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAGAGCTCTGGCAAGATGGAGAGTGGAGCCGGCCAGCAGCCGCAGCCCCGAGCCCTTCTGCCTC  
 CCGCAGCCTGCTTCTTTGCGACCGCGCGCGCGGCAGCGCGCGCGCCGCGGCAGCTCAGAGCGCGCA  
 GCAGCAACAGCCGAGGCGCGCCGCGCAGCAGGCGCCGAGCTGAGCCCGGTGGCCGACAGCCAGCCCTCA  
 GGGGGCGGTACAAGTCAGCGGCCAAGCAGGTCAAGCGCCAGCGCTCGTCCTCTCCGGAAGTATGCGCT  
 GCAAACGCGGCTCAACTTCAGCGGCTTCGGCTACAGCCTGCCACAGCAGCAGCCGGCGCGCGTGGCGCG  
 CCGCAACGAGCGCGAGCGCAACCGGGTCAAGTTGGTCAACCTGGGTTTTGCCACCCTCCGGGAGCATGTC  
 CCCAACGCGCGGCCAACAAAGATGAGCAAGGTGGAGACGCTGCGCTCGGCGGTGAGTACATCCGCG  
 CGCTGCAGCAGCTGCTGGACGAGCAGCAGCGGTGAGCGCTGCCTTTCAGGCGGGCGTCTGTGCCCCAC  
 CATCTCCCCAACTACTCCAACGACTTGAATCTATGGCGGGTCTCCGGTCTCGTCTACTCTCCGAC  
 GAGGGATCCTACGACCCTTAGCCAGAGGAACAAGAGCTGCTGGACTTTACCAACTGGTCTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: [https://cdn.origene.com/chromatograms/ja1690\\_a01.zip](https://cdn.origene.com/chromatograms/ja1690_a01.zip)

Restriction Sites: SgfI-MluI

ACCN: NM\_008553

Insert Size: 696 bp



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">BC055748</a> , <a href="#">AAH55748</a>
<b>RefSeq Size:</b>	2028 bp
<b>RefSeq ORF:</b>	696 bp
<b>Locus ID:</b>	17172
<b>UniProt ID:</b>	<a href="#">Q02067</a>
<b>Cytogenetics:</b>	10 C1
<b>Gene Summary:</b>	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]