

Product datasheet for **RC201123**

ASCL1 (NM_004316) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ASCL1 (NM_004316) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ASCL1
Synonyms: ASH1; bHLHa46; HASH1; MASH1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC201123 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGCTCTGCCAAGATGGAGAGCGGCGGCCGCGCCAGCAGCCCCAGCCGAGCCCCAGCAGCCCT
TCCTGCCGCCCGCAGCCTGTTTCTTTGCCACGGCCGACGCCGCGGCCGAGCCGCCGCGCAGCGGCAGC
GCAGAGCGCGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCGCCGAGCTGAGACCGCGGCC
GACGGCCAGCCCTCAGGGGGCGGTCACAAGTCAGCGCCAAGCAAGTCAAGCGACAGCGCTCGTCTTCGC
CCGAAGTATGCGCTGCAAACGCGGCTCAACTTCAGCGGCTTTGGCTACAGCCTGCCGAGCAGCAGCC
GGCCGCGGTGGCGCGCCGAACGAGCGCGAGCGCAACCGCGTCAAGTTGGTCAACCTGGGCTTTGCCACC
CTTCGGGAGCACGTCCCCAACGGCGCGGCAACAAGAAGATGAGTAAGGTGGAGACTGCGCTCGGCGG
TCGAGTACATCCGCGCGCTGCAGCAGCTGCTGGACGAGCATGACGCGGTGAGCGCCGCTTCAGGCGAGG
CGTCTGTGCGCCACCATCTCCCCAACTACTCCAACGACTTGAATCCATGGCCGGCTCGCCGGTCTCA
TCCTACTCGTCGGACGAGGGCTTTACGACCCGCTCAGCCCCGAGGAGCAGGAGCTTCTCGACTTACCA
ACTGGTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC201123 protein sequence
 Red=Cloning site Green=Tags(s)

MESSAKMESGGAGQQPQPQPFLPPAACFFATAAAAAAAAAAAAAQSAQQQQQQQQQQPQLRPAA
 DGQPSGGGHSAPKQVKRQRSSPELMRCKRRLNFSGFGYSLPQQQPAAVARRNERERNRVLVNLGFAT
 LREHVPNGAANKKMSKVETLRSAVEYIRALQQLLDEHDAVSAAFQAGVLSPTISPNYSNDLNSMAGSPVS
 SYSSDEGSYDPLSPEEQELLDFTNWF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6145_g09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_004316

ORF Size: 708 bp

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.

Components: 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).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_004316.4](#)

RefSeq Size: 2490 bp

RefSeq ORF: 711 bp

Locus ID: 429

UniProt ID: [P50553](#)

Cytogenetics: 12q23.2

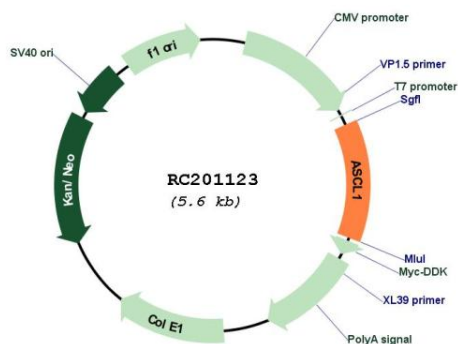
Domains: HLH

Protein Families: Druggable Genome, Transcription Factors

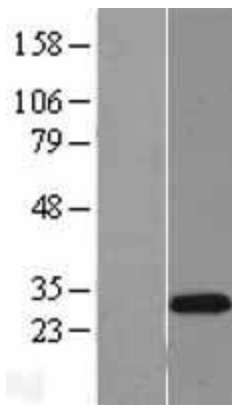
MW: 25.5 kDa

Gene Summary: This gene encodes a member of the basic helix-loop-helix (BHLH) family of transcription factors. The protein activates transcription by binding to the E box (5'-CANNTG-3'). Dimerization with other BHLH proteins is required for efficient DNA binding. This protein plays a role in the neuronal commitment and differentiation and in the generation of olfactory and autonomic neurons. Mutations in this gene may contribute to the congenital central hypoventilation syndrome (CCHS) phenotype in rare cases. [provided by RefSeq, Jul 2008]

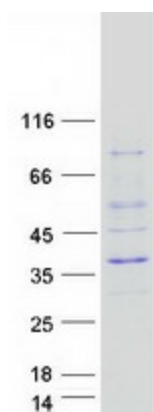
Product images:



Circular map for RC201123



Western blot validation of overexpression lysate (Cat# [LY401374]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201123 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ASCL1 protein (Cat# [TP301123]). The protein was produced from HEK293T cells transfected with ASCL1 cDNA clone (Cat# RC201123) using MegaTran 2.0 (Cat# [TT210002]).