

## Product datasheet for RC220042

### Achaete scute homolog 3 (ASCL3) (NM\_020646) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Achaete scute homolog 3 (ASCL3) (NM_020646) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Achaete scute homolog 3
Synonyms:	bHLHa42; HASH3; SGN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220042 representing NM_020646 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATGGACAACAGAGGCAACTCTAGTCTACCTGACAACTTCCTATCTTCCTGATTCTGCCCGTTGC  
CACTGACCAGGTCCTTCTATCTGGAGCCCATGGTCACTTTCCACGTGCACCCAGAGGCCCGGTGTCATC  
CCCTTACTCTGAGGAGCTGCCACGGCTGCCTTTTCCAGCGACTCTTTATCCTGGGAAATTACAGTGAA  
CCCTGCCCTTCTTTCCGATGCCTTATCAAATTACAGAGGGTGCGAGTACTCTACGGGCCAGCCT  
TACCCCGAAAAGGAATGAGCGGAAAGGCAGCGGGTGAATGTGTCAATGAAGGCTATGCCAGCTCCG  
CCATCATCTGCCAGAGGAGTATTTGGAGAAGCGACTCAGCAAAGTGGAACCCCTCAGAGCTGCGATCAAG  
TACATTAACCTACCTGCAGTCTCTTCTGTACCCTGATAAAGCTGAGACCAAGAATAACCCCTGAAAAGTTT  
CCTCCATGATAGCAACCACCAGCCACCATGCTGACCCTATGTTTCAAGATTGTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC220042 representing NM_020646 Red=Cloning site Green=Tags(s)
	MMDNRGNSSLPDKLPIFPDSARLPLTRSFYLEPMVTFHVHPEAPVSSPYSEELPRLPFPSDSLILGNYS PCPFSFPMYPNYRGCEYSYGPAFTRKNERERQVRKCVNEGQAQLRHHLPEEYLEKRLSKVETLRAAIK YINYLQSLLYPDKAETKNNPGKVSSMIATTSHHADPMFRIV

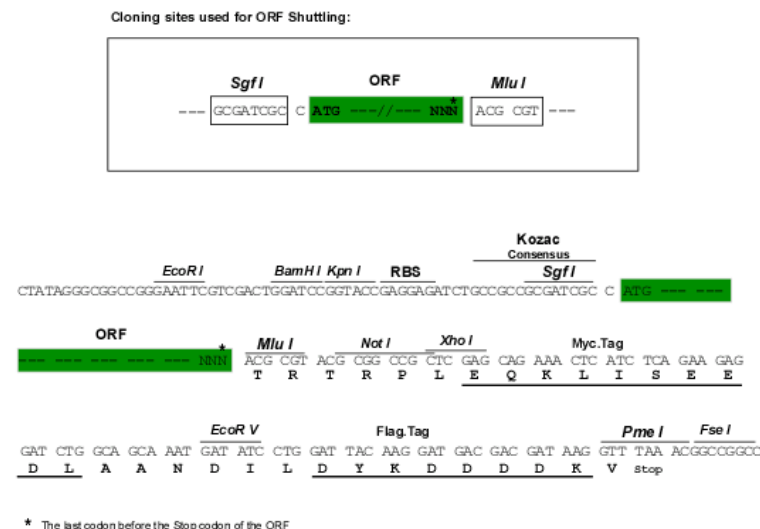
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:	<a href="https://cdn.origene.com/chromatograms/mg3281_h07.zip">https://cdn.origene.com/chromatograms/mg3281_h07.zip</a>
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Restriction Sites: Sgfl-MluI

### Cloning Scheme:



ACCN: NM 020646

ORF Size: 543 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.

RefSeq: [NM\\_020646.1](#), [NP\\_065697.1](#)

RefSeq Size: 650 bp

RefSeq ORF: 546 bp

Locus ID: 56676

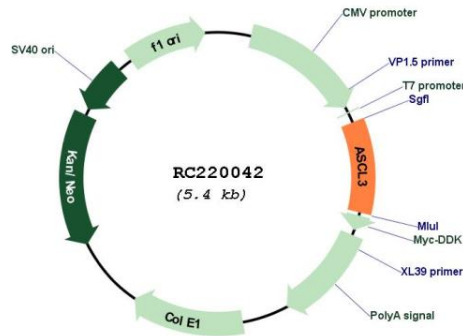
UniProt ID: Q9NQ33

**Cytogenetics:** 11p15.4

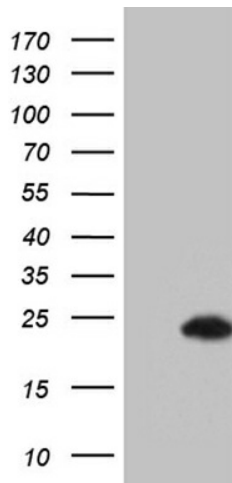
**MW:** 20.7 kDa

**Gene Summary:** Basic helix-loop-helix transcription factors, such as ASCL3, are essential for the determination of cell fate and the development and differentiation of numerous tissues (Jonsson et al., 2004 [PubMed 15475265]).[supplied by OMIM, Mar 2008]

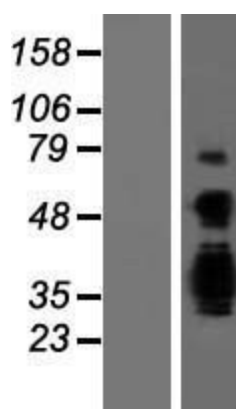
## Product images:



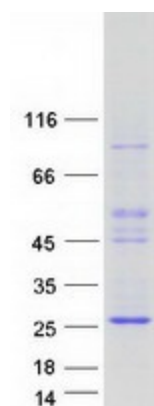
Circular map for RC220042



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ASCL3 (Cat# RC220042, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ASCL3 (Cat# [TA811864]). Positive lysates [LY412408] (100ug) and [LC412408] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY412408]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220042 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ASCL3 protein (Cat# [TP320042]). The protein was produced from HEK293T cells transfected with ASCL3 cDNA clone (Cat# RC220042) using MegaTran 2.0 (Cat# [TT210002]).