

## Product datasheet for **MG215310**

### Scd4 (NM\_183216) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	Scd4
Synonyms:	ACOD4
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

**ORF Nucleotide Sequence:** >MG215310 representing NM\_183216  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGACGGCCCACTTGCCACAAGAGATCTCCAGCAGGTGTAGCACTACCAACATCATGGAACCCCACTCCC  
GGAGACAGCAGGATGGAGAAGAGAAGATGCCCTCCAGGCAGAAGATATCCGGCCTGAAATAAAGATGA  
TCTGTATGACCCAGCTACCAGGATGAGGAGGGACCCCGCCAAGCTGGAGTACGTCTGGAGGAACATC  
ATCTTCATGGCCCTGCTGCACGTGGGAGCCCTGTACGGGATCACACTGGTCCCTCCTGCAAGTCTACA  
CCTGGCTCTTGGGAGTATTCTACAACGTGGTTGCCGGTTTGGGCATCACAGCCGGAGCGCATCGCTTGTG  
GAGCCACCGAACCTATAAAGCAAGGCTGCCCTACGCATCTTCCTCATCATGGCCAATACCATGGCTTTC  
CAGAAATGACGTGTATGAATGGGCCGAGATCACCGCGCCACCACAAGTTCTCAGAAACACACGCCGACC  
CTCACAATCCCGCGTGGCTTCTTCTCTCACGTGGGTGGCTGCTTGTGCGCAAACATCCGGCTGT  
CAAAGAGAAGGGCAAAAACCTGGACATGTCTGACCTGAAAGCCGAGAAGCTGGTGATGTTCCAGAGGAGG  
TACTACAAGCTAGCTGTACGCTCATGTTTCATCATTCTGCCCACTGGTACCCTGGTACTTGTGGGGTG  
AGACTTTTCAACACAGCTTATGCGTCTCGAATTCCTGCGGTATGCTGTGCTTCTAAACTTCACTTGGCT  
GGTGAACAGTGGGCCACCTCTACGGATACCGGCCATGACAGGGCATTGGTGCCCGGAGAATCCC  
TTCGTTTTCAATGGCATCTTATGGCGAGGGCTTCCACAACCTACCATCACAGTTCCTCCCTACGATTACTG  
TCAGTGAGTACCGCTGGCACATCAACTTACCACGTTTTTTCATCGACTGCATGGCTGCCCTGGCCCTGGC  
TTACGACCGGAAGAAAGTATCTAAGGCCGTTGTCTTAGCCAGGATTAAGAGAAGTGGAGATGGGAGTCAC  
AAGAGTAGC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



**Protein Sequence:** >MG215310 representing NM\_183216  
 Red=Cloning site Green=Tags(s)

MTAHLPQEISSRCSTTNIMEPHSRQQDGEEKMPLQAEDIRPEIKDDLDPYDPSYQDEEGPPPKEYVWRNI  
 IFMALLHVGALYGITLVPSCVYTWLLGVFYNVAVAGLITAGAHRLWSHRTYKARLPLRIFLIMANTMAF  
 QNDVYEWARDHRAHHKFSETHADPHNSRRGFFFSHVGWLLVRKHPAVKEKGKNDMSDLKAEKLVMFQRR  
 YYKLAVTLMFIIILPTLVPWYLWGETFQHSLCVSNFLRYAVLLNFTLWVNSAAHLYGYRYPYDRGIGAREN  
 FVSMASLGEGFHNYHHTFPYDYSVSEYRWHINF TTF IDCMAALGLAYDRKKVSKAVLARIKRTGDGSH  
 KSS

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_183216

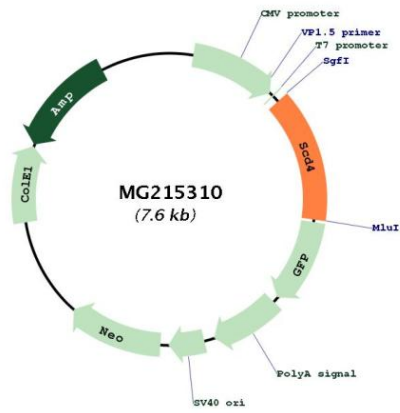
**ORF Size:** 1059 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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="#">NM_183216.3</a> , <a href="#">NP_899039.2</a>
<b>RefSeq Size:</b>	3072 bp
<b>RefSeq ORF:</b>	1062 bp
<b>Locus ID:</b>	329065
<b>UniProt ID:</b>	<a href="#">Q6T707</a>
<b>Cytogenetics:</b>	19 C3
<b>Gene Summary:</b>	Stearyl-CoA desaturase that utilizes O <sub>2</sub> and electrons from reduced cytochrome b5 to introduce the first double bond into saturated fatty acyl-CoA substrates. Catalyzes the insertion of a cis double bond at the delta-9 position into fatty acyl-CoA substrates including palmitoyl-CoA and stearyl-CoA (PubMed:12815040, PubMed:16443825). Required for the biosynthesis of membrane phospholipids, cholesterol esters and triglycerides (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG215310