

## Product datasheet for **SC120448**

### **RDH13 (NM\_138412) Human Untagged Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RDH13 (NM_138412) Human Untagged Clone
Tag:	Tag Free
Symbol:	RDH13
Synonyms:	SDR7C3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC120448 sequence for NM_138412 edited (data generated by NextGen Sequencing)

```
ATGGAGAAGTGTGAGGCGGCAGCAAAGGACATCCGCGGGGAGACCCTCAATCACCATGTC
AACGCCCCGGCACCTGGACTTGGCTTCCCTCAAGTCTATCCGAGAGTTTGCAGCAAAGATC
ATTGAAGAGGAGGAGCGAGTGGACATTCTAATCAACAACGCGGGTGTGATGCGGTGCCCC
CACTGGACCACCGAGGACGGCTTCGAGATGCAGTTTGGCGTTAACCACCTGGGTCACTTT
CTCTTGACAAACTTGCTGCTGGACAAGCTGAAAGCCTCAGCCCCTTCGCGGATCATCAAC
CTCTCGTCCCTGGCCCATGTTGCTGGGCACATAGACTTTGACGACTTGAAGTGGCAGACG
AGGAAGTATAACACCAAAGCCGCTACTGCCAGAGCAAGTTGCCATCGTCTCTTCACC
AAGGAGCTGAGCCGGCGGCTGCAAGGCTCTGGTGTGACTGTCAACGCCCTGCACCCCGGC
GTGGCCAGGACAGAGCTGGGCAGACACAGGGCATCCATGGCTCCACCTTCTCCAGCACC
ACACTCGGGCCATCTTCTGGCTGCTGGTCAAGAGCCCCGAGCTGGCCGCCAGCCAGC
ACATACCTGGCCGTGGCGGAGGAACTGGCGGATGTTTCCGAAAGTACTTCGATGGACTC
AAACAGAAAGGCCCGGCCCGGAGGCTGAGGATGAGGAGGTGGCCCGGAGGCTTTGGGCT
GAAAGTGCCCGCCTGGTGGGCTTAGAGGCTCCCTCTGTGAGGGAGCAGCCCCTCCCAGA
TAA
```

Clone variation with respect to NM\_138412.3  
402 c=>t



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**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_138412 unedited  
 NGGTGAAATTTGTATACAATCATATAGGCGGCCGCAAATTCGCACGAGGCAGTCACGTT  
 GATGGTGACAGCAGCAGTGACCGTAGCAGCCTAGAGGTGGCCGAATGCTTACTCTAATGG  
 GCTGGCCCATCCCTGAGTGTCTAGAGTTCCCAGCCCGCTTAAGGAAGGAAGAAAACACA  
 GGCAGCTTAAGTGTACGACGAGGGAGGTCTCATCGGCGGTGAGGAAGCCAGGCGGGTC  
 CCCTTCCCAGCTGAAAGGGGTTCCGAATTTCACTCTGTCCGAGGCTGGAATGCAGTAGG  
 GCAATCTCGGCTCACTGCAACCTCCACCTCCCGAGTTCAAGTGATGCTCCTGCTTCGGCC  
 TCCTGAGTAGCTGGGACTACAGGATCCCCGCCCTCCGCCCGGCCCGCCCTCGCAG  
 CCCAGTTCGGGACGCGGGCCAGCCGCGCTGCGCTTCCGCTCGCTGTGGCTGCGTCGC  
 GCGCTTCTCCTCGGAGCTACCCAGGCGGCTGGTGTGCAGCAAGCTCCGCGCCGACCCCGG  
 ACGCCTGACGCCTGACGCCTGTACCCGGCCCGGCATGAGCCGCTACCTGCTGCCGCTGTC  
 GGGCCTGGGCACGGTAGCAGGCGCCGCGTGTCTCAAGGACCTATGTCACCGGTGGGG  
 CTTGCCCCACCAGGGCCACCATCCCTGGGAAGACCGTCATCGCGACGGGCGCAACACA  
 GGCATCCGGCAAGCACACCGCCTTGTAACTGGCCATGAGAAGAGGCAACATCATTCTGG  
 CCTGCCAAACATGCAGAAGTGTGAAGGGGCACCAAGGACCATCCGCGGAGACCCTTA  
 AAACCATGGTCACCCCGCACCTGGACTTGGCTACCTTCAATCTATCCCAAAGTTGCAC  
 CCTAGATCATTGAAGAGCAACCTGATCCCAAAG

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_138412 unedited  
 NCTTTAGCTCTGNACCGCGGCCGCAANCTAGGATCGAGTTTTTTTTTTTTTTTTTTTCT  
 TTTAAATGAGCAAGTTTGTAGAGTCTGCAGTTTGGACTACCATGAGAATTGATAGGAAGGT  
 GGGAGTCCAGGCAATCCCAGGTCCTGTAGCAGCAGCTGGTGGGGTTCCCACTCCATGCC  
 GTGCAGAGCCTGAACTCAGGATGACACCTGCACCTGCTCTCTGGCTGGGCTCTGGCACAG  
 GAAGCCCTCAGCAAAACCCCGCACAGCCATGCCATAGCCAGACAACAGCTCGCTGTA  
 CCACACCATCATGGGAGACAGCAGTTATTCTGAGCATCTCACTGCTGAAGAAACCAAGGC  
 TCAGAGAGGACCATGCATGCACAAGTCCACAGGGACCCAAGAATCCACCAAGTGTGAG  
 ACAACTTGCCCATGCTCTTACGGAGCACCTTGGAAACCTCCCGACAGGCACCGCTGGC  
 TCTCCTGACGTGGCCTGCAAGTGCACGGAGCCCTTCTTCTCGGCCATCCCAAGTTTAC  
 ATTTCCAGGGGAAGCATCAGATGGCCCTCTCCCTTGTGGTAGCATAGCACACGGAACC  
 AGCCATAACCCAGGGCAGTGTCTACCTGCACGCCAGTCCCATCGAGGCCAGCAACGGGCC  
 TTTAAAACCCCATCGCCGGCTCCGCTGGCCCGTCATCCCGGGCCCTTCCGGCTTTAAGTT  
 AAGCGCCAGGAAACCCCGGCCGCGGGGCCACATTCGGTCTCCGGTTGGGTCCGGCCC  
 CTTCTGGCCTTTTCAAATCCCGCCCAAGACGGTCTCCTCGCCGAGGGCCTCCTCCC  
 CCTCCCCACGGTGAACCTCCCTTAACCCACAGGCGGGTAATTCTCTACGCCCTAAT  
 CCATTCGGGCCACCCTCCTAATACACAGATTTGAGTGGAGCCGGGGCCTTTTCTT

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_138412

**Insert Size:**

3020 bp

**OTI Disclaimer:**

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).

**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\\_138412.2](#), [NP\\_612421.1](#)

**RefSeq Size:** 2006 bp

**RefSeq ORF:** 783 bp

**Locus ID:** 112724

**UniProt ID:** [Q8NBN7](#)

**Cytogenetics:** 19q13.42

**Domains:** adh\_short

**Protein Families:** Druggable Genome

**Gene Summary:** This gene encodes a mitochondrial short-chain dehydrogenase/reductase, which catalyzes the reduction and oxidation of retinoids. The encoded enzyme may function in retinoic acid production and may also protect the mitochondria against oxidative stress. Alternatively spliced transcript variants have been described. [provided by RefSeq, Mar 2009]  
Transcript Variant: This variant (2) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at a downstream start codon, compared to variant 1. The encoded isoform (2) is shorter than isoform 1.