

## Product datasheet for MR204536

### Rdh11 (NM\_021557) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rdh11 (NM_021557) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rdh11
Synonyms:	2610319N22Rik; AI428145; Arsd1; AU045252; C85936; CGI-82; HCBP12; M42C60; Mdt1; Psdr1; SCALD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204536 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGTTCCGATTCTGCTTCTGCTCTCTTCCCTTCATCCTGTACTTGGTCACGCCAAAAATCAGGAAAA  
TGCTGTCCAGTGGGGTGTGCACATCTAATGTTCCAGCTTCCCGGAAGGTAGCCATAGTCACTGGTCTAA  
CACAGGCATTGGGAAGGAGACAGCTAAAGATCTGGCCAAAGAGGAGCCCGTGTATTTAGCTTCCGG  
GATGTGGACAAGGGGAACTGGCGGCTCGTGAGATCCAAGCCGTACAGGGAACAGTCAGGTCTTCGTAC  
GGAAACTGGACCTAGCTGATACCAAGTCTATTCGAGCCTTTGCCAAAGACTTCTTAGCTGAGGAAAAGCA  
TCTGCACCTTCTCATCAACAATGCGGGCTGATGATGTGCCCTACTCGAAGACTGCAGACGGCTTTGAG  
ATGCACATTGGCGTCAACCACCTGGGTCACTTCTCCTGACCCATTTGCTGCTAGAAAAGCTGAAGGAGT  
CGGCCCATCAAGGATAGTCAACTTGTCTTCTTTGGGACACCATCTGGGCAGGATCCACTCCATAACCT  
GCAGGGGGAGAAGTTCTACAGTGCGGTCTCGCGTACTGCCACAGCAAAGTAGCCAACTTCTTCACT  
AAGGAGCTGGCCAAGAGGCTGAAAGTTCTGGAGTGACAACATACTCTGTACACCCTGGCACAGTCCATT  
CTGAATTGACGCGTACTCCTCTATTATGAGATGGCTTTGGCAACTTTTCTTTGTTTTATCAAGACCCC  
TCAAGAGGGAGCTCAGACGAGCCTGACTGTGCCCTGACAGAAGGTCTCGAGAGCCTAAGTGGCAGTCAT  
TTCAGTGATTGCCAGTTGGCATGGTCTTTACCAAGGTCGAATGAGATAATAGCCAGGCGGCTGTGGG  
ATGTCAGCTGTGACCTGCTGGGCTCCAGTGGATTGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR204536 protein sequence  
Red=Cloning site Green=Tags(s)

MFGFLLLLSLPFILYLVTPKIRKMLSSGVCTSNVQLPGKVAIVTGANTGIGKETAKDLAQRGARVYLACR  
 DVDKGELAAREIQAVTGN SQVFRKLDLADTKSIRAFKDFLAEEKHLHLLINNAGVMMCPYSKTADGFE  
 MHIGVNH LGHFL LTHLLLEKLESAPSRIVNLSSLGHHLGRIHFHNLQGEKFYSAGLAYCHSKLANILFT  
 KELAKRLK GSGVT TYSVHPGT VHSEL TRYSSIMRWLWQLFFVF IKTPQEGAQTSLYCALTEGLESLSGSH  
 FSDCQLAWYSYQGRNEIIARRLWDVSCDLLGLPVDW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_021557

**ORF Size:** 951 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\\_021557.6](#)

**RefSeq Size:** 1574 bp

**RefSeq ORF:** 951 bp

**Locus ID:** 17252

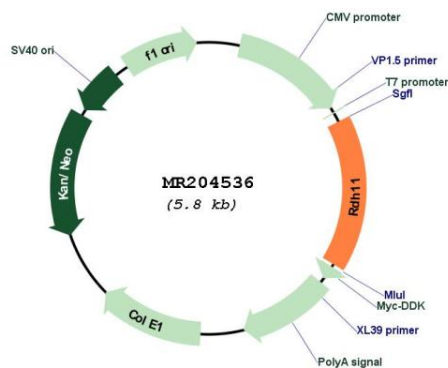
**UniProt ID:** [Q9QYF1](#)

**Cytogenetics:** 12 35.51 cM

**MW:** 35.1 kDa

**Gene Summary:** Retinol dehydrogenase with a clear preference for NADP (PubMed:12807874, PubMed:29567832). Displays high activity towards 9-cis, 11-cis and all-trans-retinol, and to a lesser extent on 13-cis-retinol (By similarity) (PubMed:12807874). Exhibits also reductive activity towards toxic lipid peroxidation products such as medium-chain aldehydes trans-2-nonenal, nonanal, and cis-6-nonenal (PubMed:12807874). Has no dehydrogenase activity towards steroid (PubMed:12807874). Seems to be required for homeostasis of retinol in liver and testis (PubMed:29567832).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR204536