

## Product datasheet for **MG204536**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rdh11 (NM_021557) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rdh11
Synonyms:	2610319N22Rik; AI428145; Arsd1; AU045252; C85936; CGI-82; HCBP12; M42C60; Mdt1; Psdr1; SCALD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG204536 representing NM_021557 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTCCGATTCTGCTTCTGCTCTCTTCCCTTCATCCTGTACTTGGTCACGCCAAAAATCAGGAAAA  
TGCTGTCCAGTGGGGTGTGCACATCTAATGTTCCAGCTTCCCGGAAGGTAGCCATAGTCACTGGTCTAA  
CACAGGCATTGGGAAGGAGACAGCTAAAGATCTGGCCAAAGAGGAGCCCGTGTGATTTAGCTTCCGG  
GATGTGGACAAGGGGAACTGGCGGCTCGTGAGATCCAAGCCGTACAGGGAACAGTCAGGTCTTCGTAC  
GGAAACTGGACCTAGCTGATACCAAGTCTATTCGAGCCTTTGCCAAAGACTTCTTAGCTGAGGAAAAGCA  
TCTGCACCTTCTCATCAACAATGCGGGCTGATGATGTGCCCTACTCGAAGACTGCAGACGGCTTTGAG  
ATGCACATTGGCGTCAACCACCTGGGTCACTTCTCCTGACCCATTTGCTGCTAGAAAAGCTGAAGGAGT  
CGGCCCATCAAGGATAGTCAACTTGTCTTCTTTGGGACACCATCTGGGCAGGATCCACTCCATAACCT  
GCAGGGGGAGAAGTTCTACAGTGCGGTCTCGCGTACTGCCACAGCAAAGTAGCCAACTTCTTCACT  
AAGGAGCTGGCCAAGAGGCTGAAAGTTCTGGAGTGACAACATACTCTGTACACCCTGGCACAGTCCATT  
CTGAATTGACGCGTACTCCTCTATTATGAGATGGCTTTGGCACTTTTCTTTGTTTTATCAAGACCCC  
TCAAGAGGGAGCTCAGACGAGCCTGACTGTGCCCTGACAGAAGGTCTCGAGAGCCTAAGTGGCAGTCAT  
TTCAGTGATTGCCAGTTGGCATGGTCTTTACCAAGGTCGAATGAGATAATAGCCAGGCGGCTGTGGG  
ATGTCAGCTGTGACCTGCTGGGCTCCAGTGGATTGG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG204536 representing NM\_021557  
 Red=Cloning site Green=Tags(s)

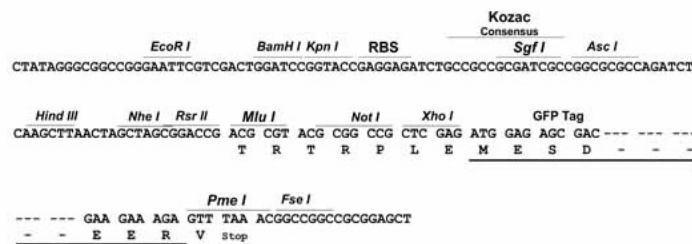
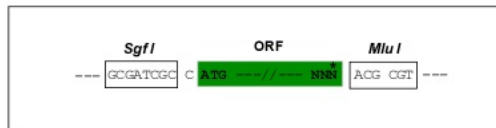
MFGFLLLLSLPFILYLVTPIKIRKMLSSGVCTSNVQLPGKVAIVTGANTGIGKETAKDLAQRGARVYLACR  
 DVDKGELAAREIQAVTGN SQVVRKLDLADTKSIRAFKDFLAEEKHLHLLINNAGVMMCPYSKTADGFE  
 MHIGVNH LGHFL LTHLLLEKLKESAPSRIVNLSSLGHHLGRIHFHNLQGEKFYSAGLAYCHSKLANILFT  
 KELAKRLKGSVTTYSVHPGTVHSELTRYSSIMRWLWQLFFVFVFKTPQEGAQTSLYCALTEGLESLSGSH  
 FSDCQLAWYSYQGRNEIIARRLWDVSCDLLGLPVDW

TRTRPLE - GFP Tag - V

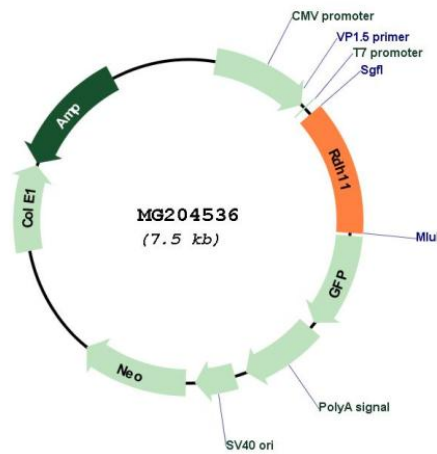
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**Plasmid Map:**



**ACCN:** NM\_021557

<b>ORF Size:</b>	948 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<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>RefSeq:</b>	<a href="#">NM_021557.6</a>
<b>RefSeq Size:</b>	3283 bp
<b>RefSeq ORF:</b>	951 bp
<b>Locus ID:</b>	17252
<b>UniProt ID:</b>	<a href="#">Q9QYF1</a>
<b>Cytogenetics:</b>	12 35.51 cM
<b>Gene Summary:</b>	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]