

## Product datasheet for **MR215363**

### **Rdh12 (NM\_030017) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rdh12 (NM_030017) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rdh12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR215363 representing NM_030017 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGTTTATCTTGGTACTGCTTACGTCCTTCTCCATCTTGTATCTGACAGCTCCATCCATCAGGA  
AGTTCTTTGCTGGTGGAGTTTGTACAACAAATGTCCAGATCCCAGGGAAGGTAGTGGTCATCACAGGTGC  
CAACACAGGCATTGGCAAGGAGACAGCCAGAGAGCTTGCTCGAAGAGGAGCACGAGTATACATTGCTTGC  
CGAGATGTGCTGAAGGGAGAGTCTGCTGCTAGTAAAATCCGAGCAGATACCAAGAACTCCCAGGTGCTAG  
TGCGGAAATTGGACCTGTCTGACACCAAATCCATCCGAGCCTTTGCTGAACGCTTCTAGCAGAGGAAAA  
GAAGCTTCATATTTTATCAACAATGCAGGAGTGATGATGTGCCATATTCTAAGACAACAGATGGCTTT  
GAGACCACTTTGGAGTCAACCACCTGGGACACTTTCTTACATACCTGCTGTTGGAGAGGCTGAAGG  
AGTCTGCTCCCGCACGGTGGTCAACCTTTCTCAATAGCTCACCTGATTGGCAAGATCCGTTTCCATGA  
CCTCCAAGGCCAGAAACGATACTGCAGTGTCTTTGCCTATGGCCACAGCAAGCTGGCCAATCTGCTCTTC  
ACTCGAGAACTGGCTAAGCGGCTCAAGGGACTGGAGTCAACCGCTATGCGGTTACCCGGGCGTTGTAT  
TGTCAGAGATCACCAGGAACTCCTACCTGCTGTGTTTGTATGGCGGCTTCTCACCTTCTTCAAGTC  
CACTTCTCAGGGGCTCAGACCAGCCTGCACTGTGCTCTGGCGGAGGACCTAGAGCCCTGAGTGGAAAG  
TACTTCAGTGACTGCAAGAGGATGTGGTATCCTCAAGGGCCCGAACAAGAAAACAGCTGAGCGATTGT  
GGAACGTCAGCTGCGAGCTTCTAGGAATCCAGTGGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR215363 representing NM\_030017  
Red=Cloning site Green=Tags(s)

MLFILVLLTSFLSILYL TAPSIRKFFAGGVCTTNVQIPGKVVVITGANTGIGKETARELARRGARVYIAC  
 RDVLKGESAASEIRADTKNSQVLVRKLDLSDTKSIRAF AERFLAEKHLHILINNAGVMMCPYSKTTDGF  
 ETHFGVNLGHFLLTYLLERLKE SAPARVVNLSIAHLIGKIRFHDLQGQKRYCSAFAYGHSKLANLLF  
 TRELAKRLQGTGTAYAVHPGVVLS EITRNSYLLCLLWRLFSPFFKSTSQGAQTSLHCALAEADLEPLSGK  
 YFSDCKRMWVSSRARNKKT AERLWNVSCCELLGIQWE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9062\\_c06.zip](https://cdn.origene.com/chromatograms/mm9062_c06.zip)

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_030017

**ORF Size:** 948 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\\_030017.4](#), [NP\\_084293.1](#)

**RefSeq Size:** 1694 bp

**RefSeq ORF:** 951 bp

**Locus ID:** 77974

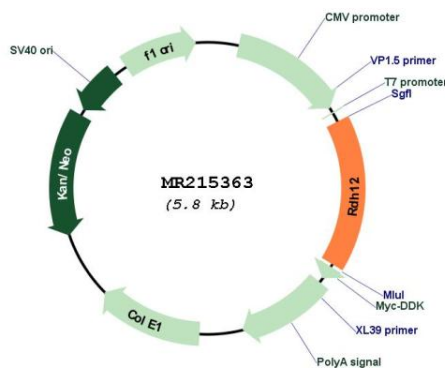
**UniProt ID:** [Q8BYK4](#)

**Cytogenetics:** 12 C3

**MW:** 35.3 kDa

**Gene Summary:** The protein encoded by this gene is an NADPH-dependent retinal reductase whose highest activity is toward 9-cis and all-trans-retinol. The encoded enzyme also plays a role in the metabolism of short-chain aldehydes but does not exhibit steroid dehydrogenase activity. Defects in the human gene are associated with Leber congenital amaurosis type 13, and Retinitis Pigmentosa 53. [provided by RefSeq, Sep 2015]

### Product images:



Circular map for MR215363