

## Product datasheet for **MR204254**

### **Rdh12 (BC016204) Mouse Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Rdh12 (BC016204) 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:	>MR204254 representing BC016204 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGTTTATCTTGGTACTGCTTACGTCCTTCTCTCCATCTTGTATCTGACAGCTCCATCCATCAGGA  
AGTTCTTTGCTGGTGGAGTTTGTACAACAAATGTCCAGATCCCAGGGAAGGTAGTGGTCATCACAGGTGC  
CAACACAGGCATTGGCAAGGAGACAGCCAGAGAGCTTGTCTCGAAGAGGAGCAGAGTATACATTGCTTGC  
CGAGATGTGCTGAAGGGAGAGTCTGCTGCTAGTAAAATCCGAGCAGATACCAAGAACTCCAGGTGCTAG  
TGCGGAAATTGGACCTGTCTGACACCAAATCCATCCGAGCCTTTGCTGAACGCTTCTAGCAGGAGTGAT  
GATGTGCCATATTCTAAGACAACAGATGGCTTTGAGACCCACTTTGGAGTCAACCACCTGGGACACTTT  
CTTCTTACATACCTGCTGTTGGAGAGGCTGAAGGAGTCTGCTCCCGCACGGGTGGTCAACCTTTCTCAA  
TAGCTCACCTGATTGGCAAGATCCGTTTCCATGACCTCCAAGGCCAGAAACGATACTGCAGTGTCTTTGC  
CTATGGCCACAGCAAGCTGGCCAATCTGCTCTTCACTCGAGAAGTGGCTAAGCGGCTCCAAGGGACTGGA  
GTCACCGCCTATGCGGTTACCCGGGCGTTGTATTGTGAGAGATCACCAGGAACTCCTACCTGCTGTGT  
TGCTATGGCGGCTCTTCTACCCCTTCTCAAGTCCACTTCTCAGGGGGCTCAGACCAGCCTGCAGTGTGC  
TCTGGCGGAGGACCTAGAGCCCCTGAGTGGAAAGTACTTCAGTACTGCAAGAGGATGTGGGTATCTCA  
AGGGCCCCGAACAAGAAAACAGCTGAGCGATTGTGGAACGTCAGCTGCGAGCTTCTAGGAATCCAGTGG  
AA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR204254 representing BC016204  
Red=Cloning site Green=Tags(s)

MLFILVLLTSFLSILYL TAPSIRKFFAGGVCTTNVQIPGKVVVITGANTGIGKETARELARARGARVYIAC  
 RDVLKGEAAASEIRADTKNSQVLVRKLDLSDTKSIRAF AERFLAGVMMCPYSKTTDGFETHFGVNLGHF  
 LLLTYLLERLKEAPARVVNLSIAHLIGKIRFHDLQGGKRYCSAFAYGHSKLANLLFTRELAKRLQGTG  
 VTAYAVHPGVVLESEITRNSYLLCLLWRLFSPFFKSTSQGAQTSLHCALAEADLEPLSGKYFSDCKRMWVSS  
 RARNKKAERLWNVSCCELLGIQWE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** BC016204

**ORF Size:** 912 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:** [BC016204](#), [AAH16204](#)

**RefSeq Size:** 1659 bp

**RefSeq ORF:** 914 bp

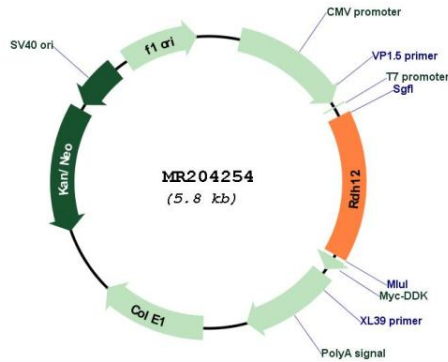
**Locus ID:** 77974

**Cytogenetics:** 12 C3

**MW:** 60.8 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 MR204254