

Product datasheet for **RG206636**

RDH12 (NM_152443) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RDH12 (NM_152443) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: RDH12
Synonyms: LCA13; RP53; SDR7C2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG206636 representing NM_152443
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTGGTCACCTGGGACTGCTCACCTCCTTCTCTCGTTCCTGTATATGGTAGCTCCATCCATCAGGA
 AGTTCTTTGCTGGTGGAGTGTGTAGAACAATGTGCAGCTTCTGGCAAGGTAGTGGTGATCACTGGCGC
 CAACACGGGCATTGGCAAGGAGACGGCCAGAGAGCTCGTAGCCGAGGAGCCGAGTCTATATTGCCTGC
 AGAGATGTACTGAAGGGGAGTCTGCTGCCAGTAAAATCCGAGTGGATACAAAGAACTCCCAGGTGCTGG
 TGCGGAAATTGGACCTATCCGACACCAAATCTATCCGAGCCTTTGCTGAGGGCTTCTGGCAGAGGAAAA
 GCAGCTCCATATTCTGATCAACAATGCGGGAGTAATGATGTGTCCATATTCCAAGACAGCTGATGGCTTT
 GAAACCCACCTGGGAGTCAACCACCTGGGCCACTTCTCCTCACCTACCTGCTCCTGGAGCAGCTAAAGG
 TGTCTGCCCTGCACGGGTGGTTAATGTGTCTCGGTGGCTCACCACATTGGCAAGATTCCCTTCCACGA
 CCTCCAGAGCGAGAAGCGCTACAGCAGGGGTTTGGCTATTGCCACAGCAAGCTGGCCAAATGTGCTTTTT
 ACTCGTGAGCTGGCCAAGAGGCTCCAAGGCACCGGGGTACCACCTACGCAGTGCACCCAGGCGTCGTCC
 GCTCTGAGCTGGTCCGGCACTCCTCCTGCTCTGCCTGCTCTGGCGGCTCTTCTCCCCCTTTGTCAAGAC
 GGCACGGGAGGGGGCGCAGACCAGCCTGCACTGCGCCCTGGCTGAGGGCCTGGAGCCCCTGAGTGGCAAG
 TACTTCAGTGACTGCAAGAGGACCTGGGTGTCTCCAAGGGCCGAAATAACAAAACAGCTGAGCGCCTAT
 GGAATGCAGCTGTGAGCTTCTAGGAATCCGGTGGGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG206636 representing NM_152443
Red=Cloning site Green=Tags(s)

MLVTLGLLLTSFFSFLYMVAPSIRKFFAGGVCRTNVQLPGKVVVITGANTGIGKETARELASRGARVYIAC
 RDVLKGESAASEIRVDTKNSQVLVRKLDLSDTKSIRAF AEGFLAEEKQLHILINNAGVMMCPYSKTADGF
 ETHLGVNHLGHFLLYLLLEQLKVSAPARVVNVSSVAHHIGKIPFHDLQSEKRYSRGFAYCHSKLANVLF
 TRELAKRLQGTGVTTYAVHPGVVRSSELVRHSSLLCLLWRLFSPFVKTAREGAQTSLHCALAEGLEPLSGK
 YFSDCKRTWVSPRARNNKTAERLWNVSCCELLGIRWE

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_152443

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_152443.1](#), [NP_689656.1](#)

RefSeq Size: 1780 bp

RefSeq ORF: 951 bp

Locus ID: 145226

UniProt ID: [Q96NR8](#)

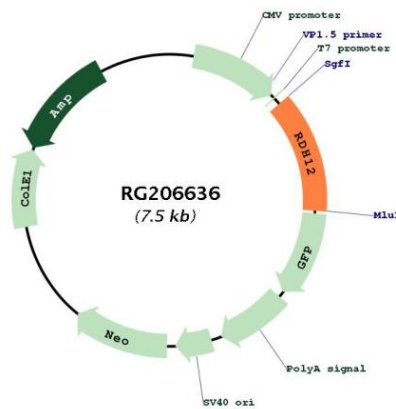
Cytogenetics: 14q24.1

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Retinol metabolism

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 this gene are a cause of Leber congenital amaurosis type 13 and Retinitis Pigmentosa 53. [provided by RefSeq, Sep 2015]

Product images:



Circular map for RG206636