

Product datasheet for **RG233744**

RDH5 (NM_001199771) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RDH5 (NM_001199771) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: RDH5
Synonyms: 9cRDH; HSD17B9; RDH1; SDR9C5
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG233744 representing NM_001199771
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTGGCTGCCTCTTCTGCTGGGTGCCTTACTCTGGGCAGTGCTGTGGTTGCTCAGGGACCGGCAGAGCC
 TGCCCGCCAGCAATGCCTTTGTCTTCATCACCGGCTGTGACTCAGGCTTTGGGCGCCTTCTGGCACTGCA
 GCTGGACCAGAGAGGCTCCGAGTCTGGCCAGCTGCCTGACCCCTCCGGGGCCGAGGACCTGCAGCGG
 GTGGCCTCCTCCCGCCTCACACCACCCTGTTGGATATCACTGATCCCCAGAGCGTCCAGCAGGCAGCCA
 AGTGGGTGGAGATGCACGTTAAGGAAGCAGGGCTTTTTGGTCTGGTGAATAATGCTGGTGTGGCTGGTAT
 CATCGGACCCACACCATGGCTGACCCGGGACGATTTCCAGCGGGTGTGAATGTGAACACAATGGGTCCC
 ATCGGGGTCAACCCTTGCCTGCTGCCTCTGCTGCAGCAAGCCCGGGCCGGGTGATCAACATCACACGCG
 TCCTGGGTGCGCTGGCAGCCAATGGTGGGGGCTACTGTGTCTCCAAATTTGGCCTGGAGGCCTTCTCTGA
 CAGCCTGAGGCGGGATGTAGCTCATTTTGGGATACGAGTCTCCATCGTGGAGCCTGGCTTCTTCCGAACC
 CCTGTGACCAACCTGGAGAGTCTGGAGAAAACCTGCAGGCTGCTGGGCACGGCTGCCTCCTGCCACAC
 AGGCCACTATGGGGGGCCTTCTCACCAGTACCTGAAATGCAACAGCGCATCATGAACCTGATCTG
 TGACCCGGACCTAACCAAGGTGAGCCGATGCCTGGAGCATGCCCTGACTGCTCGACACCCCCGAACCCGC
 TACAGCCAGGTTGGGATGCCAAGCTGCTGGCTGCCTGCCTCCTACCTGCCAGCCAGCCTGGTGGATG
 CTGTGCTACCTGGGTCTTCCCAAGCTGCCAAGCAGTCTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG233744 representing NM_001199771
 Red=Cloning site Green=Tags(s)

MWLPLLLGALLWAVLWLLRDRQSLPASNAFVFITGCDSGFGRLLALQLDQRGFRVLASCLTPSGAEDLQR
 VASSRLHTLLDITDPQSVQQAAKWVEMHVKEAGLFGLVNNAGVAGIIGPTPWLRDDFQRVLNVNTMGP
 IGVTLALLPLLQQARGRVINITSVLGRLAANGGGYCVSKFGLEAFSDSLRRDVAHFGIRVSIVEPGFFRT
 PVTNLESLEKTLQACWARLPPATQAHYGGAFLLTKYLKMQQRIMNLCDDPLTKVSRCLEHALTARHPRT
 YSPGWDAKLLWLPASYLPASLVDAVLTWVLPKPAQAVY

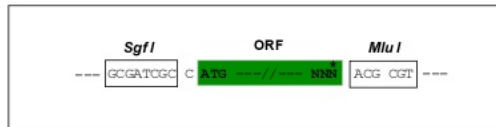
TRTRPLE - GFP Tag - V

Restriction Sites:

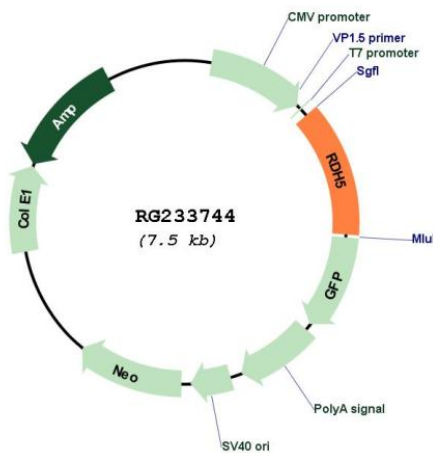
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001199771

ORF Size: 954 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:	<ol style="list-style-type: none">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_001199771.2
RefSeq Size:	1359 bp
RefSeq ORF:	957 bp
Locus ID:	5959
UniProt ID:	Q92781
Cytogenetics:	12q13.2
Protein Families:	Druggable Genome
Protein Pathways:	Retinol metabolism
Gene Summary:	This gene encodes an enzyme belonging to the short-chain dehydrogenases/reductases (SDR) family. This retinol dehydrogenase functions to catalyze the final step in the biosynthesis of 11-cis retinaldehyde, which is the universal chromophore of visual pigments. Mutations in this gene cause autosomal recessive fundus albipunctatus, a rare form of night blindness that is characterized by a delay in the regeneration of cone and rod photopigments. Alternative splicing results in multiple transcript variants. Read-through transcription also exists between this gene and the neighboring upstream BLOC1S1 (biogenesis of lysosomal organelles complex-1, subunit 1) gene. [provided by RefSeq, Dec 2010]