

Product datasheet for **MG204586**

Rdh5 (NM_134006) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rdh5 (NM_134006) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rdh5
Synonyms:	9-cis; AI987873; cRDH; RDH4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG204586 representing NM_134006 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGGCTGCCTCTGCTTCTGGGTGCCTTGCTGTGGGCAGTGCTGTGGTTGCTCAGAGACCGGCAGAGCC
TGCCGGCCAGTGATGCTTTCATCTTCATCACTGGCTGTGACTCTGGCTTTGGGCGCCTTCTGGCACTGCA
ACTTGACCAGAAGGGCTTCCAAGTCTGGCCGGCTGCCTGACCCCTCTGGAGCAGAAGACCTGCAGCAG
ATGGCCTCCTCCCGCCTCCACACAACACTACTGGATATCACTGATCCCCAGAATGTCAGCAAGTTGCCA
AGTGGGTGAAGACACGTGTTGGAGAACTGGACTTTTTGGTCTGGTGAATAACGCTGGCGTAGCTGGTAT
CATCGGGCCACACCATGGCTAACACAGGATGATTTCCAGAGAGTACTGAGTGTGAACACACTGGGGCCC
ATCGGTGTACCCCTTGCCCTGCTGCCCTGCTACAGCAGGCCAGGGTCCGGTGGTCAACATCACCAAGT
TCTTGGGCGCATAGCAGCCAATGGCGGGGCTACTGTGTCTCCAAGTTTGGCCTGGAGGCCCTTCTCTGA
CAGCCTGAGGCGGGACATGGCTCCGTTCCGAGTACAAGTCTCCATTGTGGAGCCTGGCTTCTTTCGAACC
CCTGTGACCAACCTGGAGAGTCTGGAGAGCACCCTGAAGGCTTGTGGGCCCGGTACCTCCAGCTATAC
AGGCCACTACGGGAAGCCTTCTCGATACTTATCTTCGAGTACAGCCCGCATCATGAACCTGATCTG
TGACCCAGAATAACGAAGGTGACCAGCTGCCTGGAGCATGCCCTGACTGCTCGCCACCCCGAACACGC
TACAGCCAGGCTGGGATGCCAAGTGTCTGGCTGCCTGCCTACCTCCAGCCAGGGTGGTGGATG
CTGTGCTACCTGGATCCTTCCCGGCCCGCCAGTCAGTCTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG204586 representing NM_134006
 Red=Cloning site Green=Tags(s)

MWLPLLLGALLWAVLWLLRDRQSLPASDAFIFITGCDSGFGRLLALQLDQKGFQVLGACLTPSGAEDLQQ
 MASSRLHTLLDITDPQNVQVAKWVKTRVGETGLFGLVNNAGVAGIIGPTPWLTQDDFQRVLSVNTLGP
 IGVTLALLPLLQQARGRVVNITSVLGRIAANGGGYCVSKFGLEAFSDSLRRDMPFGVQVSIVEPGFFRT
 PVTNLESLESTLKACWARLPPAIQAHYGEAFLDTYLRVQRRIMNLCDPKVTSCLEHALTARHPRT
 YSPGWDKLLWLPASYLPARVVDVLTWILPRPAQSVS

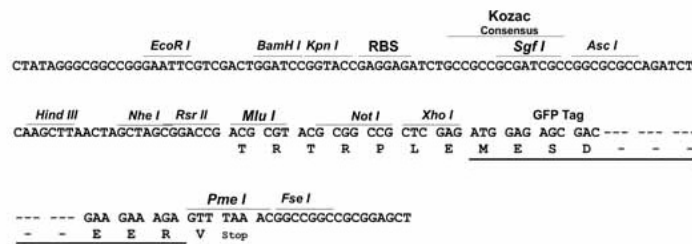
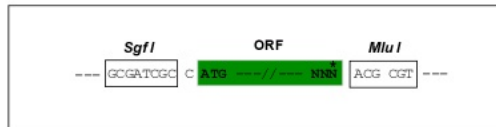
TRTRPLE - GFP Tag - V

Restriction Sites:

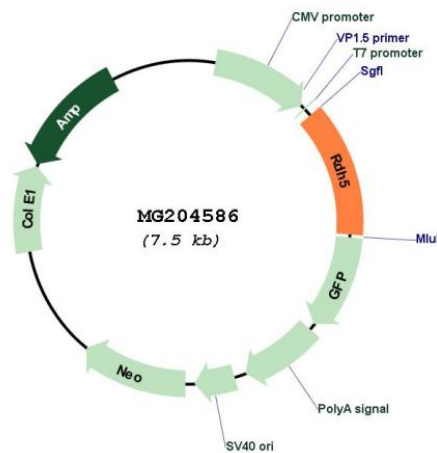
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_134006

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_134006.5
RefSeq Size:	1261 bp
RefSeq ORF:	957 bp
Locus ID:	19682
UniProt ID:	O55240
Cytogenetics:	10 77.19 cM
Gene Summary:	Catalyzes the oxidation of cis-isomers of retinol, including 11-cis-, 9-cis-, and 13-cis-retinol in an NAD-dependent manner (PubMed:10588954, PubMed:9539749). Has no activity towards all-trans retinal (By similarity). Plays a significant role in 11-cis retinol oxidation in the retinal pigment epithelium cells (RPE). Also recognizes steroids (androsterone, androstanediol) as its substrates (By similarity).[UniProtKB/Swiss-Prot Function]