

Product datasheet for **RC203411**

RDH14 (NM_020905) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: RDH14 (NM_020905) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: RDH14
Synonyms: PAN2; SDR7C4
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC203411 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGGCAGTGGCCACTGCGCGGCAGTACTGGCCGCTCTGGGCGGGCGCTGTGGCTGGCGGCCGCCGGT
 TCGTGGGGCCAGGGTCCAGCGGCTGCGCAGAGGCGGGACCCCGGCTCATGCACGGGAAGACTGTGCT
 GATCACCGGGGCAACAGCGGCTGGGCGCGCCACGGCCGCGAGCTACTGCGCCTGGGAGCGGGTG
 ATCATGGGCTGCCGGGACCGCGCGCGCCGAGGAGGCGGGTGTGAGTCCGCCGAGCTCCGCCAGG
 CCGCGGAGTGGCGCCAGAGCCTGGCGTACGGGGTGGGCGAGCTCATAGTCCGGGAGCTGGACCTCGC
 CTCGCTGCGCTCGGTGCGCGCCTTCTGCCAGGAAATGCTCCAGGAAGAGCCTAGGCTGGATGTCTTGATC
 AATAACGCAGGGATCTTCCAGTGCCTTACATGAAGACTGAAGATGGGTTTGAGATGCAGTTCGGAGTGA
 ACCATCTGGGCACTTTCTACTACCAATCTTCTCCTTGGACTCCTCAAAGTTGAGTCCCAGCAGGAT
 TGTGGTAGTTTCTTCAAACCTTATAAATACGGAGACATCAATTTTGTGACTTGAACAGTGAACAAAGC
 TATAATAAAGCTTTTGTATAGCCGGAGCAAACCTGGCTAACATCTTTTTACCAGGAACTAGCCCGCC
 GCTTAGAAGGCACAAATGTCACCGTCAATGTGTGCATCCTGGTATTGTACGGACAAATCTGGGAGGCA
 CATAACATTCCACTGTTGGTCAAACACTCTTCAATTTGGTGTGATGGGCTTTTTCAAACCTCCAGTA
 GAAGGTGCCAGACTTCCATTTATTTGGCCTCTCACCTGAGGTAGAAGGAGTGTGAGGAAGATACTTTG
 GGGATTGTAAGAGGAAGAACTGTTGCCAAAGCTATGGATGAATCTGTTGCAAGAAAACCTCTGGGATAT
 CAGTGAAGTGATGGTTGGCTGCTAAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC203411 protein sequence
Red=Cloning site Green=Tags(s)

MAVATAAAVLAALGGALWLAARRFVGPVQRLRRGGDPGLMHGKTVLITGANSGLGRATAAELLRLGARV
 IMGCRDRARAEAAAGQLRREL RQAAECGPEPGVSGV GELIVRELDLASLRSVRAFQEMLQEEPRLDVLI
 NNAGIFQCPYMKTEDGFEMQFGVNH LGHFLLTNLLLGLLKSSAPSRIVVVSSKLKYKGDINFDLLNSEQS
 YNKSFCYSRSLANILFTRELARRLEGTNVTVNVLHPGIVRTNLGRHIHPLLVKPLFNLVSWAFFKTPV
 EGAQTSIYLASSPEVEGVSGRYFGDCKEEELLPKAMDES VARKLWDISEVMVGLLK

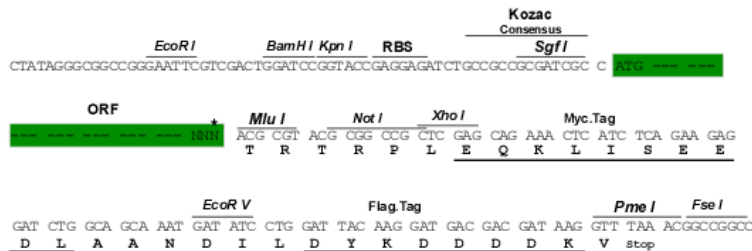
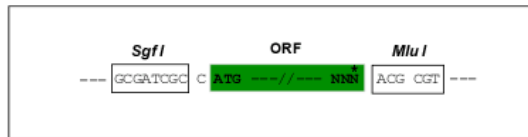
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6216_g12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_020905

ORF Size: 1008 bp

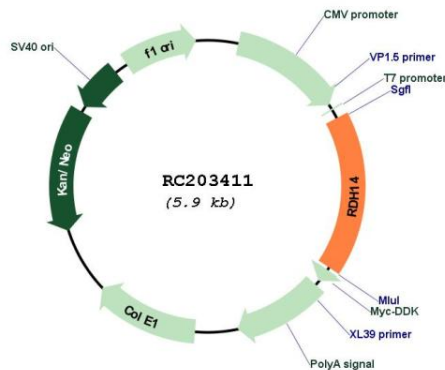
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

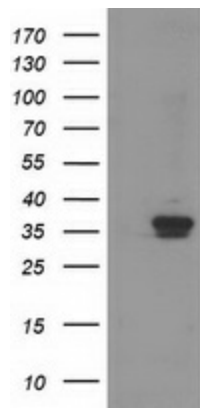
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_020905.4
RefSeq Size:	1602 bp
RefSeq ORF:	1011 bp
Locus ID:	57665
UniProt ID:	Q9HBH5
Cytogenetics:	2p24.2
Domains:	adh_short
Protein Families:	Druggable Genome, Transmembrane
MW:	36.9 kDa
Gene Summary:	Retinol dehydrogenase with a clear preference for NADP. Displays high activity towards 9-cis, 11-cis and all-trans-retinol. Shows a very weak activity towards 13-cis-retinol. Has no activity towards steroid.[UniProtKB/Swiss-Prot Function]

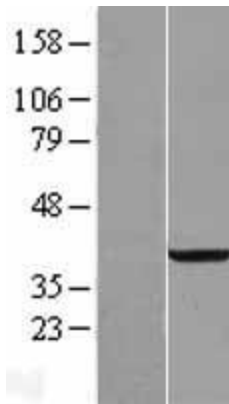
Product images:



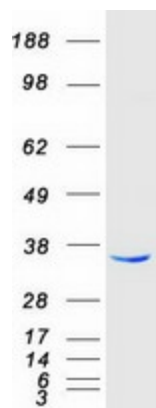
Circular map for RC203411



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RDH14 (Cat# RC203411, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RDH14(Cat# [TA502478]). Positive lysates [LY412210] (100ug) and [LC412210] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY412210]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203411 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RDH14 protein (Cat# [TP303411]). The protein was produced from HEK293T cells transfected with RDH14 cDNA clone (Cat# RC203411) using MegaTran 2.0 (Cat# [TT210002]).