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Product datasheet for RC208980

RDH10 (NM_172037) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RDH10 (NM_172037) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RDH10
Synonyms:	SDR16C4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC208980 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAACATCGTGGTGGAGTTCTTCGTGGTCACTTTCAAAGTGCTCTGGGCGTTCGTGCTGGCCGCGGCGC
GCTGGCTGGTGCGGCCCAAGGAGAAGAGCGTGGCGGGCCAGGTGTGCCTCATCACCGGCGCCGGCAGCGG
CCTGGGCCGCCTCTTCGCGCTGGAGTTCGCCCGGCGTCGGGCGCTGCTGGTGCTGTGGGACATCAACACG
CAAAGCAACGAGGAGACGGCTGGCATGGTGCGCCACATCTACCGCGACCTGGAGGCGGCCGACGCCGCTG
CGCTGCAAGCTGGGAATGGTGAGGAAGAAATTCTGCCCCACTGTAACTTGCAGGTTTTTACCTACACCTG
TGACGTGGGGAAGAGGGAGAACGTCTACCTGACGGCTGAAAGAGTCCGCAAGGAGGTTGGCGAAGTCTCA
GTCCTGGTCAATAATGCTGGTGTGGTCTCTGGGCATCACCTTCTGGAATGTCCTGATGAGCTCATTGAGA
GAACCATGATGGTCAATTGCCATGCACACTTCTGGACCACTAAGGCTTTTCTTCCTACGATGCTGGAGAT
TAATCATGGTCATATTGTGACAGTTGCAAGTTCCTTGGGATTGTTCAGTACTGCCGGAGTTGAGGATTAC
TGTGCCAGTAAATTTGGAGTTGTGGGTTTTCATGAATCCCTGAGCCATGAACTAAAGGCTGCTGAAAAGG
ATGGAATTAAAACAACCTTGGTTTGCCCTTATCTTGTAGACACTGGCATGTTCAGAGGCTGCCGAATCAG
GAAAGAAATTGAGCCTTTTCTGCCACCTCTGAAGCCTGATTACTGTGTGAAGCAGGCCATGAAGGCCATC
CTCACTGACCAGCCCATGATCTGCACTCCCCGCCTCATGTACATCGTGACCTTCATGAAGAGCATCCTAC
CATTTGAAGCAGTTGTGTGCATGTATCGGTTCCTAGGAGCGGACAAGTGTATGTACCCCTTTATTGCTCA
AAGAAAGCAAGCCACAAACAATAATGAAGCAAAAAATGGAATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC208980 protein sequence
Red=Cloning site Green=Tags(s)

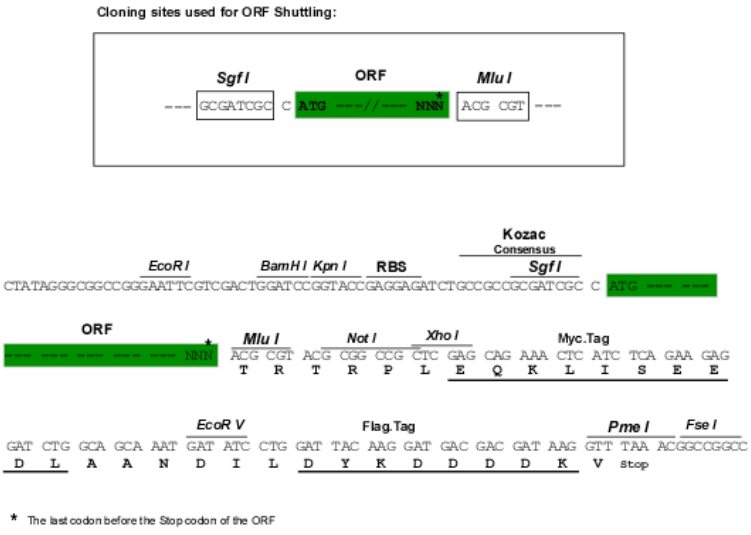
MNIVVEFFVVTFKVLWAFVLAAARWLVRPKEKSVAGQVCLITGAGSGLGRLFALEFARRRALLVLWDINT
QSNEETAGMVRHIYRDLEAADAAALQAGNGEEEILPHCNLQVFTYTCDVGKRENVYLTAERVRKEVGEVS
VLVNNAGVVSGHHLLECPDELIERTMMVNCHAHFWTTKAFLPTMLEINHGHIVTVASSLGLFSTAGVEDY
CASKFGVVGFHESLSHELKAAEKDGIKTTLVCPYLVDTGMFRGCRIRKEIEPFLPPLKPDYCVKQAMKAI
LTDQPMICTPRLMYIVTFMKSILPFEAVVCMYRFLGADKCMYPFIAQRKQATNNNEAKNGI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6357_g08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_172037

ORF Size: 1023 bp

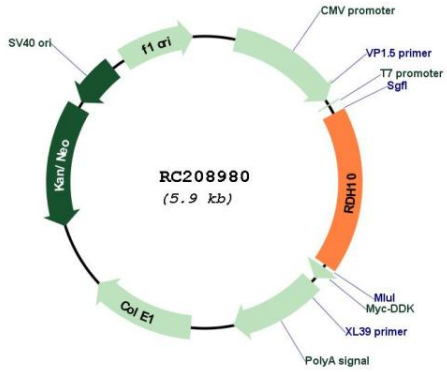
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

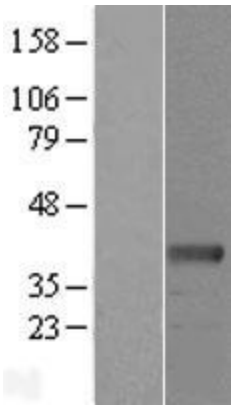
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_172037.5
RefSeq Size:	3981 bp
RefSeq ORF:	1026 bp
Locus ID:	157506
UniProt ID:	Q8IZV5
Cytogenetics:	8q21.11
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Metabolic pathways, Retinol metabolism
MW:	38.1 kDa
Gene Summary:	This gene encodes a retinol dehydrogenase, which converts all-trans-retinol to all-trans-retinal, with preference for NADP as a cofactor. Studies in mice suggest that this protein is essential for synthesis of embryonic retinoic acid and is required for limb, craniofacial, and organ development. [provided by RefSeq, Dec 2011]

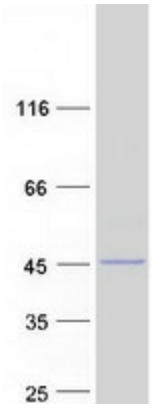
Product images:



Circular map for RC208980



Western blot validation of overexpression lysate (Cat# [LY406813]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208980 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RDH10 protein (Cat# [TP308980]). The protein was produced from HEK293T cells transfected with RDH10 cDNA clone (Cat# RC208980) using MegaTran 2.0 (Cat# [TT210002]).