

Product datasheet for **RR205471**

Adh7 (NM_134329) Rat Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | Adh7 (NM_134329) Rat Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Adh7 |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Cell Selection: | Neomycin |
| ORF Nucleotide Sequence: | >RR205471 representing NM_134329 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGACACTGCTGGAAAAGTTATTAAGTGCAAAGCAGCTGTCCTATGGGGGACGAAACCAGCCCTTCTCCA
TTGAGGACATTGAAGTGGCCCCACCAAAGGCTAAGGAAGTTCGTGTTAAGATTTGGCCACGGGAATCTG
TGGCACAGATGACCAGTGATCAAGGGAACGATGGTGTCTAAGTCCCAGTGATTGTGGACACGAAGCA
GTTGGGATTGTGGAGAGTGTGGAGAAGAGGTCACTACAGTGAGACCAGGTGACAAAGTGATCCCCCTCT
TTCTACCACAGTGTAGAGAATGCAACCCCTGCCGCAACCCGGAGGAAAATCTCTGCATTAGGAGCGACCT
GACAGGCCGTGGAGTATTGGCTGACGGCAGCAGGTTACATGCAAGGGCAAACCAGTCCAGCACTTT
ATGAACACCAGCACCTTCACTGAGTACACGGTCTGGATGAATCCTCCGTAGCTAAGATTGATGCCGAGG
CTCCTCCCGAGAAAGCCTGCTTGATTGGCTGTGGATTTTCCACTGGTTATGGGGCTGCTGTTAAACTGC
CAAGGTCAGCCCTGGCTCCACCTGTGCTGTGTTTGGCCTGGGAGGAGTTGGCCTGTCAGTCGTCATGGC
TGTAAGCGGCCCGCCCTCCCGGATCATCGGAATTGACATCAACAAGGACAAAATTCAGAAAGCCCTGG
ATGTAGGGGCCACAGAGTGTATCAATCCCAGGGACTTCACCAAGCCATCAGTGAGGTGCTGTCAGACAT
GACAGGCAACACTGTCCAGTATACTTTTGAAGTTATCGGGCGCCTTGAGACCATGTTGATGCCCTCTCA
TCTTGCCATATGAACTATGGGACCAGCGTGGTGGTTCGGGCTCCTCCGTAGCCAAAGATGCTCAGCTATG
ACCCAATGCTGCTTTTCACTGGACGGACATGGAAGGGCTGCGTCTTTGGTGGTTGGAAGAGCAGAGATGA
TGTTCCCAAATTTGGTGAATTCCTGGAAAAGAAATTTGACCTGGGCCAGTTGATAACCCACACCTTG
CCTTTTCATAACATCAGTGAAGGATTTGAATTGCTTTATTCAGGGCAAAGCATTCCGGACTGTCCTGACAT
TT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RR205471 representing NM_134329
Red=Cloning site Green=Tags(s)

MDTAGKVIKCKAAVLWGTNQPFSEIDIEVAPPKAKEVRVKILATGICGTDHVIKGTMVSKFPVIVGHEA
 VGIVESVGEVTTVRPGDKVIPLFLPQCRCNPCRNPENLCIRSDLTGRGVLADGTTRFTCKGKPVQHF
 MNTSTFTTEYTVLDESSVAKIDAEAPPEKAACLGCGFSTGYGAAVKTAKVSPGSTCAVFGGLGGVLSVVMG
 CKAAGASRIIGIDINKDKFKQKALDVGATECINPRDFTKPISEVLSDMTGNTVQYTFEIVIGRLETMVDALS
 SCHMNYGTSVVVGAPPSAKMLSYPMLLFTGRTWKGCVFGGWKS RDDVPKLVTEFLEKKFDLGLITHTL
 PFHNISEGFELLYSGQSIRTVLTF

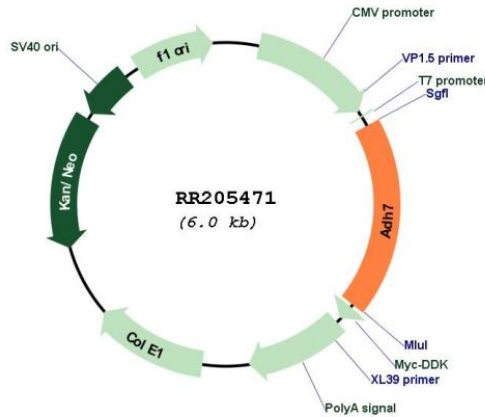
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_134329

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|-------------------------------|--|
| ORF Size: | 1122 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_134329.1 , NP_599156.1 |
| RefSeq Size: | 2048 bp |
| RefSeq ORF: | 1125 bp |
| Locus ID: | 171178 |
| UniProt ID: | P41682 |
| Cytogenetics: | 2q44 |
| MW: | 40.2 kDa |
| Gene Summary: | Catalyzes the NAD-dependent oxidation of all-trans-retinol, alcohol, aldehyde and omega-hydroxy fatty acids and their derivatives. Oxidizes preferentially all trans-retinol, all-trans-4-hydroxyretinol, 9-cis-retinol, 2-hexenol, and long chain omega-hydroxy fatty acids such as juniperic acid. In vitro can also catalyzes the NADH-dependent reduction of all-trans-retinal and aldehydes and their derivatives. Reduces preferentially all trans-retinal, all-trans-4-oxoretinal and hexanal. Catalyzes in the oxidative direction with higher efficiency. Therefore may participate in retinoid metabolism, fatty acid omega-oxidation, and elimination of cytotoxic aldehydes produced by lipid peroxidation.[UniProtKB/Swiss-Prot Function] |