

Product datasheet for **RC209073**

RED1 (ADARB1) (NM_001112) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RED1 (ADARB1) (NM_001112) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ADARB1
Synonyms:	ADAR2; DRABA2; DRADA2; NEDHYMS; RED1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>RC209073 representing NM_001112
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGATATAGAAGATGAAGAAAACATGAGTTCAGCAGCACTGATGTGAAGGAAAACCGCAATCTGGACA
ACGTGTCCCCAAGGATGGCAGCACACCTGGGCCCTGGCGAGGGCTCTCAGCTCTCCAATGGGGTGGTGG
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CCAGGTTTTTGGGGCTCTGGTCCACAAAAGAAAAGGCAAACTCCATGCTGCTGAGAAGGCCCTTGAGG
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TCCCCGGTGCCTGCCAGCCTAGCCAGCCTCCTCTCCCTGCCTTACCACCATTCCACCCCGAGTGGGA
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GTGTGGCTGGAGTCGTATGACAACAGGCACAGATGTTAAAGATGCCAAGGTGATAAGTGTCTACAG
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CGGTTGTACTGTCTGGATGCGTGTGCACGGCAAGGTTCCCTCCCACTTACTACGCTCCAAGATTACCA
AACCCAACGTGTACCATGAGTCCAAGCTGGCGGCAAGGAGTACCAGGCCCAAGGCGCGTCTGTTTAC
AGCCTTCATCAAGGCGGGGCTGGGGCCTGGGTGGAGAAGCCACCGAGCAGGACCAGTTCTCACTCAGC
CCC

AGCGGACCGACGCGTACGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209073 representing NM_001112
 Red=Cloning site Green=Tags(s)

MDIEEENMSSSSTDVKENRNLDNVSPKDGSTPGPEGSQLSNGGGGGPGRKRPLEEGSNHSHKYRLKRR
 RKTPGPVLPKNALMQLNEIKPGLQYTLLSQTGPVHAPLFVMSVEVNGQVFEGSGPTKKKAKLHAAEKALR
 SFVQFPNASEAHLAMGRTL SVNTDFTSDQADFPDTL FNGFETPDKAEPFVYVGSNGDSSFSSSGLSLSA
 SPVPASLAQPPLPALPPFPSPGKNPVMILNELRPGLKYDFLSEGESHAHSFVMSVVVDGQFFEGSGRN
 KKLAKARAAQSALAAIFNLHLDQTPSRQPIPSEGLQLHLPQVLADAVSRLVLGKFGDLTDNFSSPHARRK
 VLAGVVMTTGTDVYKDAKVISVSTGKTCINGEYMSDRGLALNDCHAEIISRRSLLRFLYTQLELYLNKDD
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 IPVRSNAISQTDGVLQGERLLTMSCSDKIARWNVVGIQGSLLSIFVEPIYFSSIIILGSLYHGDHL SRAM
 YQRISNIEDLPPLYTLNKPLLSGISNAEARQPGKAPNFSVNWTVGDSAIEVINATTGKDELGRASRLCKH
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 P

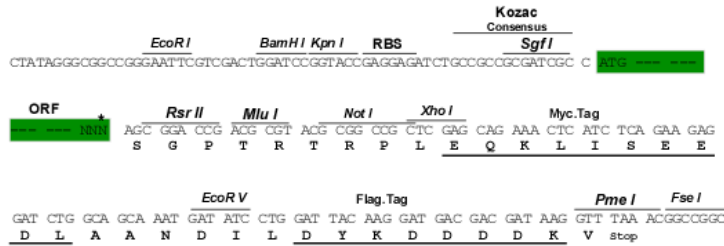
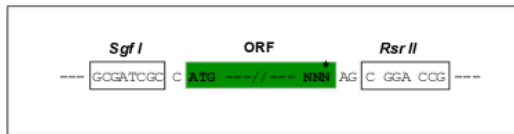
SGPTRRRLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3522_c07.zip

Restriction Sites: SgfI-RsrII

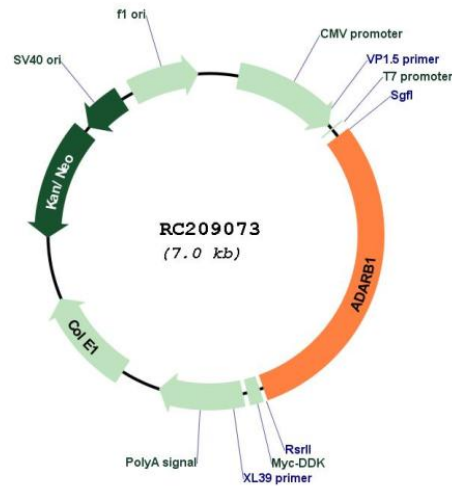
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001112

ORF Size: 2103 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in *E. coli* are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001112.4](#)

RefSeq Size: 6881 bp

RefSeq ORF: 2106 bp

Locus ID: 104

UniProt ID: [P78563](#)

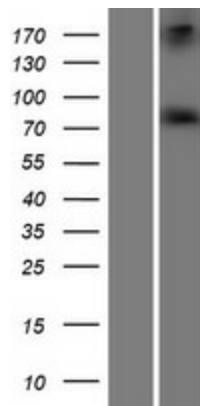
Cytogenetics: 21q22.3

Protein Families: Druggable Genome

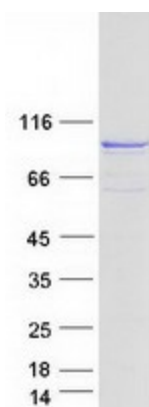
MW: 76.5 kDa

Gene Summary: This gene encodes the enzyme responsible for pre-mRNA editing of the glutamate receptor subunit B by site-specific deamination of adenosines. Studies in rat found that this enzyme acted on its own pre-mRNA molecules to convert an AA dinucleotide to an AI dinucleotide which resulted in a new splice site. Alternative splicing of this gene results in several transcript variants, some of which have been characterized by the presence or absence of an ALU cassette insert and a short or long C-terminal region. [provided by RefSeq, Jul 2008]

Product images:



Western blot validation of overexpression lysate (Cat# [LY420129]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209073 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ADARB1 protein (Cat# [TP309073]). The protein was produced from HEK293T cells transfected with ADARB1 cDNA clone (Cat# RC209073) using MegaTran 2.0 (Cat# [TT210002]).