

Product datasheet for **RC219761**

ADAR1 (ADAR) (NM_001025107) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADAR1 (ADAR) (NM_001025107) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ADAR1
Synonyms:	ADAR1; AGS6; DRADA; DSH; DSRAD; G1P1; IFI-4; IFI4; K88DSRBP; P136
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC219761 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCGAGATCAAGGAGAAAATCTGCGACTATCTCTTCAATGTGTCTGACTCCTCTGCCCTGAATTTGG
 CTA AAAAATATTGGCCTTACCAAGGCCCGAGATATAAATGCTGTGCTAATTGACATGGAAAGCAGGGGGA
 TGTCTATAGACAAGGGACAACCCCTCCCATATGGCATTGACAGACAAGAAGCGAGAGAGGATGCAATC
 AAGAGAAAACGAACAGTGTTCCTGAAACCCTCCAGCTGCAATCCCTGAGACAAAAGAAACGCAGAGT
 TCCTCACCTGTAATATACCCACATCAAATGCCTCAAATAACATGGTAACCAAGAAAAGTGGAGAATGG
 GCAGGAACCTGTCATAAAGTTAGAAAACAGGCAAGAGGCCAGACCAGAACCAGCAAGACTGAAACCCT
 GTTCATTACAATGGCCCTCAAAGCAGGGTATGTTGACTTTGAAAATGGCCAGTGGGCCACAGATGACA
 TCCAGATGACTTGAATAGTATCCGCGCAGCACCAGGTGAGTTTCGAGCCATCATGGAGATGCCCTCCTT
 CTACAGTCATGGCTTGCACGGTGTTCACCTACAAGAACTGACAGAGTGCCAGCTGAAGAACCCCATC
 AGCGGGCTGTTAGAATATGCCAGTTTCGCTAGTCAAACCTGTGAGTTCAACATGATAGAGCAGAGTGGAC
 CACCCCATGAACCTCGATTTAAATTCAGGTTGTCATCAATGGCCGAGAGTTTCCCCAGCTGAAGCTGG
 AAGCAAGAAAAGTGGCCAAGCAGGATGCAGCTATGAAAGCCATGACAATTCGCTAGAGGAAGCCAAGCC
 AAGGACAGTGGAAAATCAGAAGAATCATCCCACTATCCACAGAGAAAAGAAATCAGAGAAGACTGCAGAGT
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 GATGCGGCTCCTCGTGTCTTATTGGGGAGAACGAGAAGGCAGAACGCATGGGTTTACAGAGGTAACCC
 CAGTGACAGGGGCCAGTCTCAGAAGAACTATGCTCCTCCTCTCAAGTCCCAGAACACAGCCAAAGAC
 ACTCCCTCTCACTGGCAGCACCTTCCATGACCAGATAGCCATGCTGAGCCACCGGTCTTCAACACTCTG
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 TCCAAAATAAAAAAGACTGTGTCATTCCATCTGTATATCAGCACTGCTCCGTGTGGAGATGGCGCCCTCTT
 TGACAAGTCTGCAGCGACCGTGTATGGAAAGCACAGAATCCCGCCACTACCCTGTCTTCGAGAATCCC
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 AGAACATTTTTCTTCTATTTAAGAAGCTCTGCTCCTTCCGTTACCGCAGGGATCTACTGAGACTCTCCTA
 TGGTGAGGCCAAGAAAGCTGCCCGTACTACGAGACGGCAAGAAGTACTTCAAAAAGGCTGAAGGAT
 ATGGGCTATGGAACTGGATTAGCAAACCCAGGAGGAAAAGAACTTTTATCTCTGCCAGTA

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGAT AAGGTTTAA

Protein Sequence: >RC219761 protein sequence
Red=Cloning site Green=Tags(s)

MAEIKEKICDYL FNVSDSSALNLAKNI GLTKARDINAVLIDMERQGDVYRQGTTPPIWHL TDKKRERMQI
 KRNTNSVPETAPAAIPETKRNAEFLTCNIPTSNASNMMVTTEKVENGEQEPVIKLENRQEARPEPARLKPP
 VHYNGPSKAGYVDFENGQWATDDIPDDLNSIRAAPGEFRAIMEMPSFYSHGLPRCSPYKLLTECQLKNPI
 SGLLEAYA QFASQTCEFNMIEQSGPPHEPRFKFQVVINGREFPPAEAGSKK VAKQDAAMKAMTILLEEAKA
 KDSGKSEESSHYSTEKESEKTAESQTPPTSATSFSGKSPVTTLLECMHKLGN SCEFRLLSKEGPAHEPK
 FQYCVAVG AQTFPSVSAPS KKVAKQMAAEEAMKALHGEATNSMASDNQPEGMISESLDNLESMPN KVRK
 IGELVRYLNTNPV GLL EYARSHGFAAEFKLVDQSGPPHEPKFVYQAKVGG RWFPAVCAH SKKQKQEAA
 DAALRVLIGENEAERMGFTEVTPVTGASLRRTMLLLSR SPEAQP KTLPLTGSTFHDQIAMLSHRCFNTL
 TNSFQPSLLGRKILAAIIMKKDSEDMGVVSLGTGNRCVKGDSLKGETVNDCHAEIISR RGFIRFLYS
 ELMKYNSQTAKDSIFEPAKGGEKLQIKKTVSFHLYISTAPCGD GALFDKSCSDRAMESTESRHYPVFENP
 KQKGLRTKVENGEGTIPVESSDIVPTWDGIRLGERLRTMSCSDKILRWNVLGLQGALLTHFLQPIYLKSV
 TLGYLFSQGH LTRAI CCRVTRDGS AFEDGLRHPFIVNH PKVGRVSIYDSKRQSGTKETS VNWCLADGYD
 LEILDGTRGTVDGPRNELSRVSKNIFLLFKLCSFRYRRDLLRLSYGEAKKAARDYETAKNYFKKGLKD
 MGYGNWISKPQEKNFYLCPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6694_h02.zip

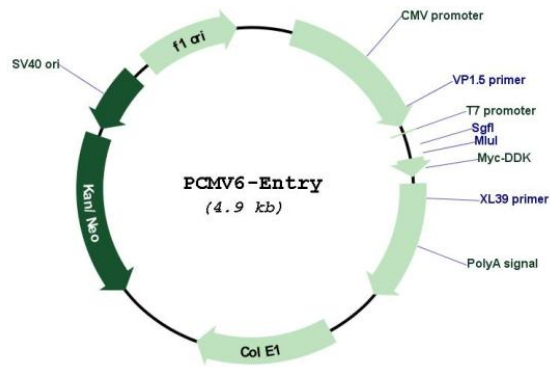
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001025107

ORF Size: 2796 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_001025107.3](#)

RefSeq Size: 6532 bp

RefSeq ORF: 2796 bp

Locus ID: 103

UniProt ID: [P55265](#)

Cytogenetics: 1q21.3

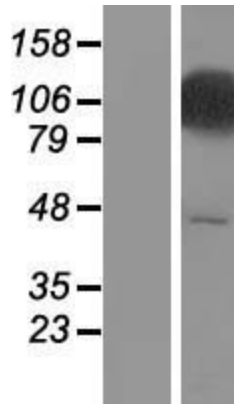
Protein Families: Druggable Genome

Protein Pathways: Cytosolic DNA-sensing pathway

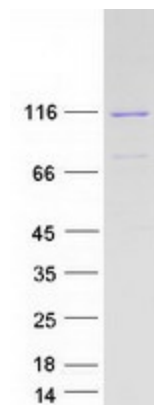
MW: 103.6 kDa

Gene Summary: This gene encodes the enzyme responsible for RNA editing by site-specific deamination of adenosines. This enzyme destabilizes double-stranded RNA through conversion of adenosine to inosine. Mutations in this gene have been associated with dyschromatosis symmetrica hereditaria. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2010]

Product images:



Western blot validation of overexpression lysate (Cat# [LY422591]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219761 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ADAR protein (Cat# [TP319761]). The protein was produced from HEK293T cells transfected with ADAR cDNA clone (Cat# RC219761) using MegaTran 2.0 (Cat# [TT210002]).