

## Product datasheet for **RC223644**

### ADAR1 (ADAR) (NM\_015841) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ADAR1 (ADAR) (NM_015841) 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)
ORF Nucleotide Sequence:	>RC223644 representing NM_015841 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAATCCGCGGCAGGGGTATCCCTCAGCGGATACTACACCCATCCATTTCAAGGCTATGAGCACAGAC  
AGCTCAGATACCAGCAGCCTGGCCAGGATCTTCCCCAGTAGTTTCTGCTTAAGCAAATAGAATTTCT  
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TCACCCTACAAGAACTGACAGAGTGCCAGCTGAAGAACCCCATCAGCGGGCTGTAGAATATGCCAGT  
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ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC223644 representing NM\_015841  
Red=Cloning site Green=Tags(s)

MNPRQGYSLSGYYTHPFQGYEHRQLRYQQPGPGSSPSSFLKQIEFLKGGQLPEAPVIGKQTPSLPPSLPG  
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 VRPDGHSQGAPNSDPSLEPEDRNSTSVSEDLLEPFIAVSAQAWNQHSGVVRPDSHSQSPNSDPGLEPED  
 SNSTSALEDPLEFLDMAEIKEKICDYLFNVSDSSALNLAKNIGLTKARDINAVLIDMERQGDVYRQGTTP  
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 RVLIGENEKAERMGTTELPLTGSTFHDQIAMLSHRCFNTLTNSFQPSLLGRKILAAIIMKKDSEDMGVVV  
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 SFHLYISTAPCGDGFALFDKSCSDRAMESTESRHYPVFENPKQGLRTRKVENGEGTIPVESSDIVPTWDGI  
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 RHPFIVNHPKVG RVSIYDSKRQSGTKETSVNWLADGYDLEILDGTRGTVDGPRNELSRVSKKNIFLLF  
 KKLCSFRYRRDLLRLSYGEAKKAARDYETAKNYFKKGLKDMGYGNWISKPQEKNFYLCPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6488\\_d03.zip](https://cdn.origene.com/chromatograms/mk6488_d03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_015841

**ORF Size:** 3543 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](mailto: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\\_015841.4](#)

**RefSeq Size:** 6505 bp

**RefSeq ORF:** 3546 bp

**Locus ID:** 103

**UniProt ID:** [P55265](#)

**Cytogenetics:** 1q21.3

**Domains:** z-alpha, DSRM, A\_deamin

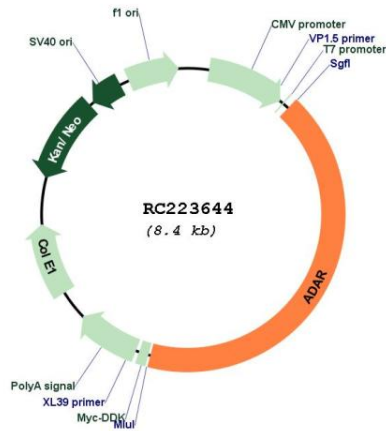
**Protein Families:** Druggable Genome

**Protein Pathways:** Cytosolic DNA-sensing pathway

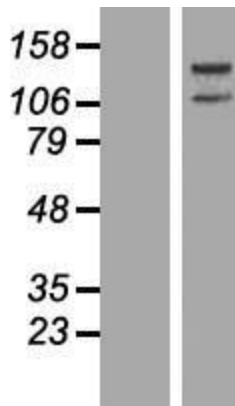
**MW:** 130.9 kDa

**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:



Circular map for RC223644



Western blot validation of overexpression lysate (Cat# [LY414369]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223644 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).