

Product datasheet for **RG219700**

ADAR1 (ADAR) (NM_015840) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADAR1 (ADAR) (NM_015840) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ADAR
Synonyms:	ADAR1; AGS6; DRADA; DSH; DSRAD; G1P1; IFI-4; IFI4; K88DSRBP; P136
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219700 representing NM_015840 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAATCCGCGGCAGGGGTATCCCTCAGCGGATACTACACCCATCCATTTCAAGGCTATGAGCACAGAC
AGCTCAGGTACCAGCAGCCTGGCCAGGATCTTCCCCAGTAGTTTCTGCTTAAGCAAATAGAATTTCT
CAAGGGGAGCTCCAGAAGCACCAGGATGGAAAGCAGACACCGTCACTGCCACCTTCCCTCCAGGA
CTCCGGCCAAGGTTTCCAGTACTACTTGCCTCCAGTACCAGAGGCAGGCAAGTGGACATCAGGGGTGCC
CCAGGGGCGTGATCTCGGAAGTCAGGGGCTCCAGAGAGGGTTCCAGCATCCTTACCACGTGCCAGGAG
TCTGCCACAGAGAGGTGTTGATTGCCTTTCCTCACATTTCCAGGAACTGAGTATCTACCAAGATCAGGAA
CAAAGGATCTTAAAGTTCCTGGAAGAGCTTGGGAAAGGGAAGGCCACCACAGCACATGATCTGTCTGGGA
AACTTGGGACTCCGAAGAAAGAAATCAATCGAGTTTTATACTCCCTGGCAAAGAAGGGCAAGCTACAGAA
AGAGGCAGGAACACCCCTTTGTGGAAAATCGCGGTCTCCACTCAGGCTTGAACCGAAGACAGCGGAGTG
GTAAGACCAGACGGTCATAGCCAAGGAGCCCCAACTCAGACCCGAGTTTGAACCGAAGACAGAACT
CCACATCTGTCTCAGAAGATCTTCTTGAGCCTTTATTGCAGTCTCAGCTCAGGCTTGAACCGAAGAC
CGGAGTGGTAAGACCAGACAGTCATAGCCAAGGATCCCCAACTCAGACCCAGGTTTGAACCTGAAGAC
AGCAATCCACATCTGCCTTGAAGATCCTCTTGAGTTTTAGACATGGCCGAGATCAAGGAGAAAATCT
GGACTATCTCTCAATGTGCTGACTCCTCTGCCCTGAATTTGGCTAAAAATATTGGCCTTACCAAGGC
CCGAGATATAAATGCTGTGCTAATTGACATGGAAGGCAGGGGGATGTCTATAGACAAGGACAACCCCT
CCCATATGGCATTGACAGACAAGAAGCGAGAGAGGATGCAAATCAAGAGAAATACGAACAGTGTTCCTG
AAACCGCTCCAGCTGCAATCCCTGAGACAAAAGAAACGCAGAGTTTCTCACCTGTAATATACCCACATC
AAATGCCTCAAATAACATGGTAACCACAGAAAAAGTGGAGAATGGGCAGGAACCTGTCATAAAGTTAGAA
AACAGGCAAGAGGCCAGACCAGAACCAGCAAGACTGAAACCACTGTTTATTACAATGGCCCTCAAAG
CAGGGTATGTTGACTTTGAAAATGGCCAGTGGCCACAGATGACATCCAGATGACTTGAATAGTATCCG
CGCAGCACCGGTGAGTTTCGAGCCATCATGGAGATGCCCTCCTTCTACAGTCATGGCTTCCACCGTGT



[View online >](#)

TCACCCTACAAGAACTGACAGAGTGCCAGCTGAAGAACCCCATCAGCGGGCTGTTAGAATATGCCAGT
TCGCTAGTCAAACCTGTGAGTTCAACATGATAGAGCAGAGTGGACCACCCCATGAACCTCGATTTAAATT
CCAGGTTGTCAATGGCCGAGAGTTTTCCCCAGCTGAAGCTGGAAGCAAGAAAGTGGCCAAGCAGGAT
GCAGCTATGAAAGCCATGACAATTCTGTAGAGGAAGCCAAGCCAAGGACAGTGGAAAAATCAGAAGAAT
CATCCCCTATTCCACAGAGAAAAGAAATCAGAGAAGACTGCAGAGTCCCAGACCCCAACCCCTTCAGCCAC
ATCCTTCTTTCTGGGAAGAGCCCGTCAACCACTGCTTGAGTGTATGCACAAAATTGGGGAACCTCTGC
GAATTCCTGTCCTGTCCAAAGAAGGCCCTGCCATGAACCCAAGTTCCAATACTGTGTTGCAGTGGGAG
CCCAAACCTTCCCAGTGTGAGTGTCTCCAGCAAGAAAGTGGCAAAGCAGATGGCCGCAGAGGAAGCCAT
GAAGGCCCTGCATGGGGAGGCGACCAACTCCATGGCTTCTGATAACCAGCCTGAAGGTATGATCTCAGAG
TCACTTGATAACTTGAATCCATGATGCCCAACAAGGTGAGGAAGATTGGCGAGCTCGTGAGATACCTGA
ACACCAACCTGTGGGTGGCCTTTTGGAGTACGCCGCTCCCATGGCTTTGCTGCTGAATCAAGTTGGT
CGACCAGTCCGGACCTCCTCACGAGCCCAAGTTCGTTTACCAAGCAAAAGTTGGGGTTCGCTGGTCCCA
GCCGTCTGCGCACACAGCAAGAAGCAAGGAAGCAGGAAGCAGCAGATGCGGCTCCTCGTGTCTTGATTG
GGGAGAACGAGAAGGCAGAACGCATGGGTTTACAGAGCTCCCTCTCACTGGCAGCACCTCCATGACCA
GATAGCCATGCTGAGCCACCGGTGCTTCAACACTGACTAACAGCTTCCAGCCCTCCTTGCTCGGCCGC
AAGATTCTGGCCGCCATCATTATGAAAAAGACTCTGAGGACATGGGTGTGCTGCTCAGCTTGGGAACAG
GGAATCGTGTGTGAAAGGAGATTCTCTCAGCCTAAAAGGAGAAACTGTCAATGACTGCCATGCAGAAAT
AATCTCCCGAGAGGCTTCATCAGGTTTCTCTACAGTGTGTTAATGAAATACAACCTCCAGACTGCGAAG
GATAGTATATTTGAACCTGCTAAGGGAGGAGAAAAGCTCCAAATAAAAAAGACTGTGTCATTCCATCTGT
ATATCAGCACTGCTCCGTGTGGAGATGGCGCCCTTTTGACAAGTCTGCAGCGACCGTGTATGGAAAAG
CACAGAATCCCGCCACTACCCTGTCTTCGAGAATCCCAACAAGGAAAGCTCCGCACCAAGGTGGAGAAC
GGAGAAGGCACAATCCCTGTGGAATCCAGTGACATTGTGCCTACGTGGGATGGCATTGCGCTCGGGGAGA
GACTCCGTACCATGTCCTGTAGTGACAAAATCCTACGCTGGAACGTGCTGGGCCCTGCAAGGGGCACTGTT
GACCCACTTCTGCAGCCCATTTATCTCAAATCTGTACATTGGGTTACCTTTTTCAGCCAAGGGCATCTG
ACCCGTGCTATTTGCTGTCGTGTGACAAGAGATGGGAGTGCATTTGAGGATGGACTACGACATCCCTTTA
TTGTCAACCACCCCAAGGTTGGCAGAGTCAAGCATATGATTCCAAAAGGCAATCCGGGAAGACTAAGGA
GACAAGCGTCAACTGGTGTCTGGCTGATGGCTATGACCTGGAGATCCTGGACGGTACCAGAGGCACTGTG
GATGGGCCACGGAATGAATTGTCCCGGTCTCCAAAAGAACATTTTCTTCTATTTAAGAAGCTCTGCT
CCTTCCGTTACCGCAGGGATCTACTGAGACTCTCCTATGGTGAGGCAAGAAAGCTGCCCGTACTACGA
GACGGCCAAGAATACTTCAAAAAGGCCTGAAGGATATGGGCTATGGGAACTGGATTAGCAAACCCAG
GAGGAAAAGAACTTTTATCTCTGCCAGTA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG219700 representing NM_015840
 Red=Cloning site Green=Tags(s)

MNPRQGYSLSGYYTHPFQGYEHRQLRYQQPGPGSSPSSFLLKQIEFLKQQLPEAPVIGKQTPSLPPSLPG
 LRPRFPVLLASSTRGRQVDIRGVPRGVHLGSQGLQRGFQHPSPRGRSLPQRGVDCLESSHFQELSIYQDQE
 QRILKFLLEELGEGKATTAHDLGKLGTPKKEINRVLYSLAKKGLKQKEAGTPPLWKIAVSTQAWNQHSGV
 VRPDGHSQGAPNSDPSLEPEDRNSTSVSEDLLEPFIAVSAQAWNQHSGVVRPDSHSQSPNSDPGLEPED
 SNSTSALEDPLEFLDMAEIKEKICDYLFNVSDSSALNLAKNIGLTKARDINAVLIDMERQGDVYRQGTTP
 PIWHLTDKKRERMQIKRNTNSVPETAPAAIPETKRNAEFLTCNIPTSNASNMMVTTKEVNGQEPVIKLE
 NRQEARPEPARLKPPVHYNGPSKAGYVDFENGQWATDDIPDDLNSIRAAPGEFRAIMEMPSFYSHGLPRC
 SPYKKLTECQLKNPISGLLEYAQFASQTCEFNMIQSGPPHEPRFKFQVVIINGREFPPAEAGSKKVAQD
 AAMKAMTILLEAKAKDSGKSEESSHYSTEKESEKTAESQTPPSATFFSGKSPVTTLLECMHKLGNCS
 EFRLLSKEGPAHEPKFQYCVAVGAQTFPSVSAPSKKVAQMMAEEAMKALHGEATNSMASDNQPEGMISE
 SLDNLESMPNPKVRKIGELVRYLNTNPVGLLEYARSHGFAAEFKLVDQSGPPHEPKFVYQAKVGGRWFP
 AVCAHKKQKQEAADAALRVLIGENEAERMGFTELPLTGSTFHDQIAMLSHRCFNTLTNSFQPSLLGR
 KILAAIIMKKDSEDMGVVSLGTGNRCVKGDSLKGETVNDCHAEIISRGRGIRFLYSELMKYNSQTAK
 DSIFEPAKGGEKLQIKKTVSFHLYISTAPCGDGLFDKSCSDRAMESTESRHYPVFENPKQKGLRTKVEN
 GEGTIPVESSDIVPTWDGIRLGERLRTMSCSDKILRWNVLGLQGALLTHFLQPIYLKSVTLGYLFSQGH
 TRAIICRVTRDGSFEDGLRHPFIVNHPKVGRVSIYDSKRQSGKTKETSVNWCLADGYDLEILDGTRGT
 DGPRNELSRVSKNIFLLFKKLCFRYRRDLLRLSYGEAKKAARDYETAKNYFKKGLKDMGYGNWISKPQ
 EEKNFYLCPV

TRTRPLE - GFP Tag - V

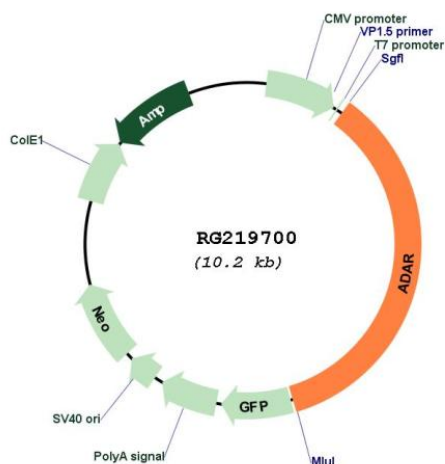
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_015840

ORF Size: 3600 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_015840.3](#), [NP_056655.2](#)

RefSeq Size: 6614 bp

RefSeq ORF: 3603 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

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]