OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC204455

Adar (NM_019655) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adar (NM_019655) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Adar
Synonyms:	Adar1; Adar1p110; Adar1p150; AV242451; mZaADAR
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>BC042505

GCCACAGGTGCGGGCCTTGCCGGCACTATGTCTCAAGGGTTCAGGGGACCCACAGGGGTGTTCCCTCACC
AGACACAGTCGTACTCGGACCCTAGTCATGAGCATAGCAAGTGGAGATACCTGCAGCCACAGGGGCCGGA
GTCTTACCCTAGGAGTTTCCAGCTTCAGCAGATAGAGTTTCTCAAAGGGCGGCTCCCAGAAGCTCCCTTG
ATTGGAATACAAACCCAGTCACTGCCGCCATTCCTCCCAGGACACTGGCCAAGATTCCCAGGGCCACCTG
CCCAAGACAGGCAACTGGAAATCTGGGAGTTCCCCAGGAGTGTGACTCTCAGAAATCAGGGGTTCCACAT
AGGACCCCCACTTCCTCCCCCACACAGCAGGGGTCCACCATGGAGAGGTGCTGACGGGCTTTGCTCACAC
TTCCGGGAGCTGAGCATCAGTCAGAGTCCGGAGCAGAAGGTTCTAAACCGCCTGGAAGAGCTTGGGGAGG
GGAAGGCCACCACTGCCCATGTGCTAGCCAGAGAGCTCAGAATCCCCAAAAGGGACATCAATCGTATTTT
GTACTCCCTGGAAAAGAAGGGAAAGCTGCACAGAGGAAGGGGGAAACCTCCTTTGTGGAGCCTTGTGCCC
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GAGAGCCTGGTTTGGACAGTGAGGACGGAGACCCTGCCTCTGACTTAGAAGGACCTTCTGAGCCTCTTGA
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GCTAAGAACATTGGCCTCACCAAGGCCCGAGATGTGACCTCAGTGCTGATTGACTTGGAAAGGCAAGGCG
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TTCCCTGCCTGCCACCCGCCCCCAGCAGGTGCCTCAAGCAGTGTGGCAGCCTCCAAGAGAGTGGAGAATG
GGCAGGAGCCTGCGATAAAGCATGAAAGTAGGCATGAGGCCAGACCAGGACCAATGAGACTGCGGCCTCA
CGCTTATCACAATGGCCCCTCTAGAGCAGGGTATGTGGCCTCTGAAAATGGCCAGTGGGCCACAGATGAC
ATCCCAGATAACTTGAATAGTATCCACACAGCACCAGGTGAGTTTCGAGCCATCATGGAGATGCCCTCCT
TCTACAGCCCTACCTTGCCACGGTGTTCACCCTACAAGAAGCTAACTGAGTGCCAGCTGAAGAACCCTGT
CAGCGGGTTGTTAGAGTATGCTCAGTTCACTAGTCAGACCTGTGATTTCAACCTGATAGAGCAGAGTGGA
CCGTCCCATGAACCTCGATTTAAATTCCAGGTTGTCATCAATGGGCGGGAATTTCCCCCAGCTGAGGCTG
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CAAAGACAGTGGTCAACCAGAAGACTTGTCCCACTGTCCCATGGAAGAAGACTCGGAGAAACCAGCAGAG
GCTCAGGCCCCCAGCTCCTCAGCAACATCCTTGTTCTCTGGGAAGAGCCCAGTTACTACACTACTTGAGT
GCATGCACAAACTAGGGAACTCCTGTGAATTCCGTCTCCTGTCCAAAGAAGGCCCTGCTCATGACCCCAA

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GTTCCAGTACTGTGTAGCAGTAGGAGCCCAGACCTTCCCCCCTGTGAGCGCCCCCAGCAAGAAGGTAGCA
AAGCAGATGGCCGCAGAGGAAGCCATGAAGGCGCTGCAGGAGGAGGCAGCCAGTTCAGCGGATGACCAGT
CTGGAGGTGCGAACACAGACTCACTTGATGAATCTATGGCTCCCAACAAGATCAGGAGGATTGGTGAGCT
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GAGTTCAAGCTCATTGACCAGTCTGGACCTCCTCACGAACCCAAGTTTGTTTACCAAGCAAAAGTTGGGG
GCCGCTGGTTTCCAGCCGTGTGTGCACACAGCAAGAAACAGGGCAAGCAGGATGCAGCGGATGCAGCCCT
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CCCTGCTCGGCCGCAAGATCCTGGCTGCCATTATTATGAAAAGAGATCCAGAGGACATGGGTGTTGTCGT
GAGTTTGGGGACAGGCAATCGCTGTGTGAAAGGGGACTCTCTCAGCCTGAAGGGAGAGACGGTCAATGAC
TGCCATGCCGAAATCATCTCCCGGAGGGGCTTCATCAGGTTTCTCTACAGTGAACTGATGAAGTACAACC
ACCACACTGCCAAGAACAGCATATTTGAGCTTGCCAGGGGAGGAGAGAAGCTGCAGATAAAGAAGACGGT
TTCTTTTCATCTCTACATCAGCACGGCGCCATGTGGAGATGGAGCCCTCTTTGACAAATCCTGCAGTGAC
CGTGCCGTGGAAAGCACAGAGTCCCGCCATTACCCTGTCTTTGAAAATCCCAAGCAAGGCAAGCTTCGCA
CCAAGGTGGAGAATGGGGAAGGCACAATTCCTGTGGAGTCCAGTGATATTGTACCCACGTGGGATGGCAT
CCGCCTTGGGGAAAGACTCCGTACCATGTCCTGTAGTGACAAAATCCTACGCTGGAATGTGCTGGGCCTG
CAAGGGGCGTTGTTGACGCACTTCCTACAGCCTGTGTACCTGAAATCTGTAACCTTAGGTTACCTTTTCA
GCCAAGGGCATCTGACCCGTGCTATTTGCTGCCGCGTGACCAGAGATGGGAAAGCATTTGAGGATGGACT
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GGAAAGACCAAGGAAACAAGCGTCAACTGGTGCATGGCTGATGGCTATGACCTAGAGATCCTGGATGGCA
CCAGAGGCACTGTGGATGGACCAGGGAAAGAGTTGTCTCGGGTGTCCAAGAAGAATATTTTCCTTCAGTT
TAAGAAGCTCTGCTCCTTCCGAGCCCGCAGAGATTTACTGCAGCTCTCTTATGGTGAAGCCAAGAAAGCT
GCCCGTGACTATGACTTAGCCAAGAACTACTTCAAGAAAAGCCTGCGAGACATGGGCTATGGGAATTGGA
TCAGCAAACCCCAGGAGGAAAAGAACTTTTACCTCTGTCCAGTACCCAATGACTGATAGTGGGGCGCGTT
TCTCCTGGGGTCAGAGGGCGGTCATGGCATTCCTCATCACACCGGGCCAGAGGATAGGAGCTTTTTTTAC
CCACTCCCCCCTTTTTTAATGGTAGAACCATAATAGATGGTACCAAGAACTGCTTTCTTTGGGATTTCGA
GGTGGGGTCCAGCCAAGTCCCCACCTCCCTTTTCTCAAGGGAAGAGGCCAAGATTAAAGGAAATGGAAAT
GCTACCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI

ACCN: NM_019655

Insert Size: 3459 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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: BC042505, AAH42505

RefSeq Size:	3764 bp
RefSeq ORF:	3459 bp
Locus ID:	56417
UniProt ID:	Q99MU3
Cytogenetics:	3 F1
Gene Summary:	Catalyzes the hydrolytic deamination of adenosine to inosine in double-stranded RNA (dsRNA) referred to as A-to-I RNA editing. This may affect gene expression and function in a number of ways that include mRNA translation by changing codons and hence the amino acid sequence of proteins; pre-mRNA splicing by altering splice site recognition sequences; RNA stability by changing sequences involved in nuclease recognition; genetic stability in the case of RNA virus genomes by changing sequences during viral RNA replication; and RNA structure-dependent activities such as microRNA production or targeting or protein-RNA interactions. Can edit both viral and cellular RNAs and can edit RNAs at multiple sites (hyper-editing) or at specific sites (site-specific editing). Its cellular RNA substrates include: bladder cancer-associated protein (BLCAP), neurotransmitter receptors for glutamate (GRIA2) and serotonin (HTR2C) and GABA receptor (GABRA3). Site-specific RNA editing of transcripts encoding these proteins results in amino acid substitutions which consequently alters their functional activities. Exhibits low-level editing at the GRIA2 Q/R site, but edits efficiently at the R/G site and HOTSPOT1. Does not affect polyomavirus replication but provides protection against virus-induced cytopathic effects. Essential for embryonic development and cell survival and plays a critical role in the maintenance of hematopoietic stem cells. [UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (1) uses a different splice site, compared to variant 3. The resulting protein (isoform 1) is shorter when it is compared to isoform 3.