

## Product datasheet for **RN200425**

### **Adarb1 (NM\_001111057) Rat Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Adarb1 (NM_001111057) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Adarb1
Synonyms:	Adar2; Red1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >RN200425 representing NM\_001111057  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCCCCAAGGACAGCAGCACACCCGGGCTGGCGAGGGTATTCGGCTCTCCAACGGGGTGGTGGGA  
 GCACCAGCAGGAAGCGGCCCTGGAGGAGGGCAGCAATGGCCACTCCAAGTACCGCTGAAGAAGCGAAG  
 GAAAACGCCAGGGCCCGTTCTACCCAAGAACGCCCTGATGCAGCTGAACGAGATCAAACCGGCTTACAG  
 TACATGCTGCTGTCCCAGACAGGACCCGTGCACGCACCTCTGTTTGTCTGTGTGGAGGTAAACGGGC  
 AGGTCTTTGAAGGCTCCGGCCCTACAAAGAAGAAGGCAAAGCTGCATGCTGCTGAGAAGGCCCTGCGGTC  
 TTTTGTCCAGTTTCCAACGCCTCTGAGGCCACCTGGCCATGGGAAGGACCCCTCCTCGTGAACACAGAC  
 TTCACGTCGACAGGCGGACTTCCCGACACGCTCTTCAATGGCTTTGAGACTCCAGACAAGTCGGAGC  
 CACCCTTCTACGTAGGCTCCAATGGGGATGACTCCTTCAGCTCAAGCGGAGACGTTAGCCTGTCAGCCTC  
 CCCAGTGCCTGCCAGCCTTACCCAGCCTCTCTGCCATCCCACCACCATTCCCACCCCAAGTGGGAAG  
 AACCCCGTGATGATCTTGAATGAGCTGCGCCAGGGCTGAAGTATGACTTCTCTCCGAGAGTGGGGAGA  
 GCCACGCCAAGAGCTTTGTCTGTCCGTGGTGGTATGAGTGGCCAGTTCTTTGAGGGCTCAGGGAGAAACAA  
 GAAGCTTGCCAAGGCCGGGCTGCACAGTCTGCCTTGGCTACTGTCTTCAATTTGCACTTGGACCAAACG  
 CCATCTCGCCAGCCTGTCTCAGTGAGGGTCTCCAGTTGCATTTGCCACAGGATTGGCAGATGCTGTCT  
 CACGCCTGGTCTGGTAAGTTCAGTGACCTGACAGACAACCTTTTCTCCCTCACGCACGAAGAAAAGT  
 GCTCTCTGGAGTAGTGATGACCACAGGTACAGATGTCAAAGATGCCAAGGTGATAAGTGTTCGACAGGG  
 ACGAAGTCATCAACGGGAATACATGAGTGACCGTGGCTGGCTCTCAATGACTGCCACGCAGAGATAA  
 TCTCCGAAGTCCCTGCTCAGTCTTCTATACGCACAGCTCGAGCTTTACTTAAATAACAAGAAGACCA  
 GAAAAAGTCCATATTTTCAGAAGTCAGAGCGGGTGGGTTCCGGCTGAAGGATACCGTGCAGTTCCACCTG  
 TACATCAGCACCTCACCTGCGGAGACGCCAGAATATTCTCTCCCATGAGCCCGTGTAGAGGAACCGG  
 CTGATAGACATCCGAATCGCAAAGCAAGGGGACAGCTGCGGACTAAAATAGAATCTGGCGAGGGGACAAT  
 CCCTGTGCGCTCAAATGCCAGCATCCAGACCTGGGATGGGGTGTGCAGGGGGAACGGCTGCTCACCATG  
 TCCTGCAGTGACAAGATAGCACGCTGGAACGTGGTGGCATCCAGGGGGCCCTGCTCAGCATTTTCGTGG  
 AGCCCATCTACTTCTCCAGCATCATCTGGGCAGCCTGTACCACGGGACCACCTCTCCAGGGCCATGTA  
 CCAGCGGATCTCCAACATAGAGGACCTGCCACCCTCTACACCCTCAACAAGCCCTGCTCAGCGGTATC  
 AGCAATGCAGAGGCACGGCAGCCAGGGAAGGCACCCAACCTCAGTGTCAACTGGACGGTGGGCGACACGG  
 CCATTGAGGTATCAATGCCACAACAGGGAAGGATGAGCTAGGCCGCCCTCCCGCTGTGTAAGCACGC  
 GCTGTAAGTGTGCTGGATGCGGGTACACGAAAGGTGCCCCCACTGCTGCGCACCAAGATCACCAAG  
 CCCACCACCTACCACGAGTCCAAGCTGGCAGCGAAGGATACCAGGCTGCCAAGGCACGCTGTCTACTG  
 CCTTCATCAAGCGGGGCTGGGCGCTGGGTGGAGAAGCCACAGAGCAGGACCAGTTCTCTTCACTCC  
 CTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul  
**ACCN:** NM\_001111057  
**Insert Size:** 2034 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).

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001111057.1, NP_001104527.1</u>
<b>RefSeq Size:</b>	6429 bp
<b>RefSeq ORF:</b>	2034 bp
<b>Locus ID:</b>	25367
<b>UniProt ID:</b>	<u>P51400</u>
<b>Cytogenetics:</b>	20p12
<b>Gene Summary:</b>	<p>This gene encodes a double-stranded-RNA-specific adenosine deaminase that is involved in editing pre-mRNAs by site-specific conversion of adenosine (A) to inosine (I). Substrates for this enzyme include ionotropic glutamate receptors (GluR2-6) and serotonin receptor (5HT2C). Studies in rodents have shown that this protein can modify its own pre-mRNA by A-&gt;I editing to create a novel acceptor splice site, alternative splicing to which results in down regulation of its protein expression. Additional splicing events result in transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (4, also referred to as 2e) results from an auto RNA editing event (AA-&gt;AI) in the intronic sequence that creates a novel acceptor splice site, splicing to which inserts 47 nt into the coding region causing a frame-shift, compared to transcript variant 2. Translation initiation from the upstream AUG will result in a very short protein of 82 aa. However, studies reported in PMID:10331393 show that leaky translation initiation from an in-frame, downstream AUG allows some protein expression, and that this isoform (3) exhibits RNA editing activity. Isoform 4 is 24 aa shorter at the N-terminus compared to isoform 2. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of the transcript and the encoded protein are supported by transcript alignment and PMID:10331393.</p>