

Product datasheet for **SC336043**

Aminoadipate aminotransferase (AADAT) (NM_001286683) Human Untagged Clone

Product data:

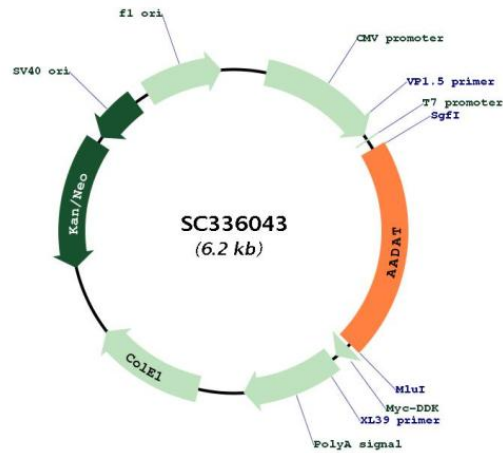
Product Type: Expression Plasmids
Product Name: Aminoadipate aminotransferase (AADAT) (NM_001286683) Human Untagged Clone
Tag: Tag Free
Symbol: AADAT
Synonyms: KAT2; KATII; KYAT2
Vector: pCMV6-Entry (PS100001)
Fully Sequenced ORF: >SC336043 representing NM_001286683.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGAATTACGCACGGTTCATCACGGCAGCGAGCGCAGCCAGAAACCCCTTCTCCCATCCGGACCATGACT
GACATATTGAGCAGAGGACCAAAATCGATGATCTCCTTGGCTGGTGGCTTACCAATCCAAACATGTTT
CCTTTTAAAGACTGCCGTAATCACTGTAGAAAATGGAAAGACCATCCAATTTGGAGAAGAGATGATGAAG
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AAATTGCATAATCCTCCTACCATCCATTACCCACCCAGTCAAGGACAAAATGGATCTATGTGCACATCT
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GAACCTGCTTATTCAGGAACTCTCAAAGTCTGCACCCACTGGGCTGCAACATTATTAATGTTGCCAGT
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GATCCTTACTATTTTCTCCAGTTAACAAGTTCAGGGTACCAACATTTCTTTCCATGGATGTTGATGGA
CGTGTCATCAGAGCTGACTCTTTTTCAAAAATCATTTCTCTGGGTTGAGAATAGGATTTTAACTGGT
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CAGCTCATGATATCACAGCTTCTACACGAATGGGAGAGAAGGTTTCATGGCTCATGTAGACAGGGTT
ATTGATTTCTATAGTAACCAGAAGGATGCAATACTGGCAGCTGCAGACAAGTGGTTAACTGGTTTGGCA
GAATGGCATGTTCTGCTGCTGGAATGTTTTATGGATTAAGTTAAAGGCATTAATGATGTAAAAGAA
CTGATTGAAGAAAAGGCCGTTAAGATGGGGTATTAATGCTCCCTGGAAATGCTTTCTACGTCGATAGC
TCAGCTCTAGCCCTTACTTGAGAGCATCCTTCTCTTCAGCTTCTCCAGAACAGATGGATGTGCCCTTC
CAGGATTAGCACAACTTATAAAAGAATCTTTA TGA
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Restriction Sites: SgfI-MluI



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Plasmid Map:


ACCN: NM_001286683

Insert Size: 1278 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: [NM_001286683.1](#)

RefSeq Size: 2193 bp

RefSeq ORF: 1278 bp

Locus ID: 51166

UniProt ID: [Q8N5Z0](#)

Cytogenetics: 4q33

Protein Pathways: Lysine biosynthesis, Lysine degradation, Metabolic pathways, Tryptophan metabolism

MW: 47.4 kDa

Gene Summary: This gene encodes a protein that is highly similar to mouse and rat kynurenine aminotransferase II. The rat protein is a homodimer with two transaminase activities. One activity is the transamination of alpha-amino adipic acid, a final step in the saccharopine pathway which is the major pathway for L-lysine catabolism. The other activity involves the transamination of kynurenine to produce kynurenine acid, the precursor of kynurenic acid which has neuroprotective properties. Several transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Nov 2013]
Transcript Variant: This variant (4) differs in the 5' UTR and uses an alternate in-frame splice junction at the 3' end of the first coding exon compared to variant 3. The resulting isoform (b) has the same N- and C-termini but is shorter compared to isoform a. Variants 1, 2, and 4 all encode the same isoform (b).