

Product datasheet for **RG238181**

Aminoadipate aminotransferase (AADAT) (NM_001286682) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aminoadipate aminotransferase (AADAT) (NM_001286682) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AADAT
Synonyms:	KAT2; KATII; KYAT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238181 representing NM_001286682. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGAATTACGCACGGTTCATCACGGCAGCGAGCGCAGCCAGAAACCCCTTCTCCATCCGGACCATGAGT
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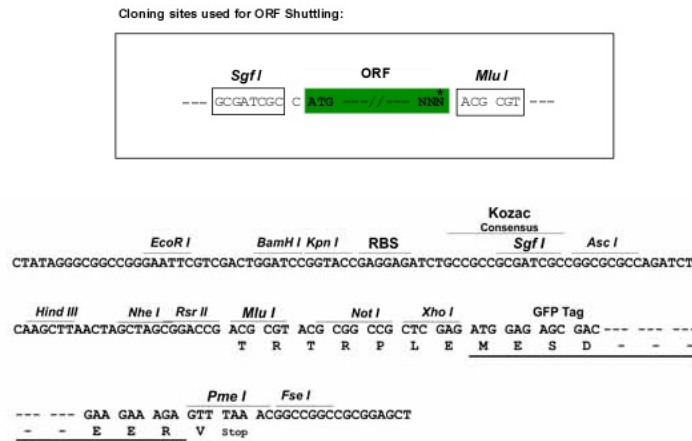
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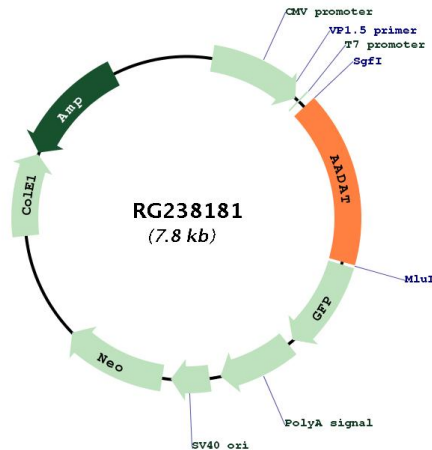
Protein Sequence: >Peptide sequence encoded by RG238181
 Blue=ORF Red=Cloning site Green=Tag(s)

MNYARFITAASAARNPSPIRTMSEKRADILSRGPKSMISLAGGLPNPNMFPFKTAVITVENGKTIQFGE
 EMMKRALQYSPSAGIPELLSWLKQLQIKLHNPTIHYPPSQGQMDL CVTSGSQQLCKVFEMIINPGDN
 VLLDEPAYSGTLQSLHPLGCNIINVASDESGIVPDSL RDILSRWKPEDAKNPQKNTPKFLYTVPNGNPN
 TGNLSLTERKKEIYELARKYDFLIIEDDPYYFLQFNKFRVPTFLSMDVDGRVIRADSFSKIISGLRIG
 FLTGPKPLIERVILHIQVSTLHPSTFNQLMISQLLHEWGEEGFMAHVDRVIDFYSNQKDAILAAADKWL
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 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001286682

ORF Size: 1287 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).

RefSeq: [NM_001286682.1](#), [NP_001273611.1](#)

RefSeq Size: 2120 bp

RefSeq ORF: 1290 bp

Locus ID: 51166

UniProt ID: [Q8N5Z0](#)

Cytogenetics: 4q33

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

MW: 48.3 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-aminoadipic 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]