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 SC120012

ornithine aminotransferase (OAT) (NM_000274) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ornithine aminotransferase (OAT) (NM_000274) Human Untagged Clone
Tag:	Tag Free
Symbol:	ornithine aminotransferase
Synonyms:	GACR; HOGA; OATASE; OKT
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC120012 sequence for NM_000274 edited (data generated by NextGen Sequencing)

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ATGTTTTCCAAACTAGCACATTTGCAGAGGTTTGCTGTACTTAGTCGCGGAGTTCATTCT
TCAGTGGCTTCTGCTACATCTGTTGCAACTAAAAAAACAGTCCAAGGCCCTCCAACCTCT
GATGACATTTTTGAAAGGGAATATAAGTATGGTGCACACAACTACCATCCTTTACCTGTA
GCCCTGGAGAGAGGAAAAGGTATTTACTTATGGGATGTAGAAGGCAGAAAATATTTTGAC
TTCCTGAGTTCTTACAGTGCTGTCAACCAAGGGCATTGTCACCCCAAGATTGTGAATGCT
CTGAAGAGTCAAGTGGACAAATTGACCTTAACATCTAGAGCTTTCTATAATAACGTACTT
GGTGAATATGAGGAGTATATTACTAAACTTTTCAACTACCACAAAGTTCTTCCTATGAAT
ACAGGAGTGGAGGCTGGAGAGACTGCCTGTAAACTAGCTCGTAAGTGGGGCTATACCGTG
AAGGGCATTCAGAAATACAAAGCAAAGATTGTTTTTGCAGCTGGGAACTTCTGGGGTAGG
ACGTTGTCTGCTATCTCCAGTTCCACAGACCCAACCAGTTACGATGGTTTTGGACCATTT
ATGCCGGGATTCGACATCATTCCCTATAATGATCTGCCCGCACTGGAGCGTGCTCTTCAG
GATCCAAATGTGGCTGCGTTCATGGTAGAACCAATTCAGGGTGAAGCAGGCGTTGTTGTT
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ATTGCTGATGAAATACAGACAGGATTGGCCAGAACTGGTAGATGGCTGGCTGTTGATTAT
GAAAATGTCAGACCTGATATAGTCCTCCTTGGAAAGGCCCTTTCTGGGGGCTTATACCCT
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ATGAAGCTACCTTCTGATGTTGTAACTGCCGTAAGAGGAAAAGGATTATTAAATGCTATT
GTCATTAAAGAAACCAAAGATTGGGATGCTTGGAAGGTGTGTCTACGACTTCGAGATAAT
GGACTTCTGGCCAAGCCAACCCATGGCGACATTATCAGGTTTGCGCCTCCGCTGGTGATC
AAGGAGGATGAGCTTCGAGAGTCCATTGAAATTATTAACAAGACCATCTTGTCTTTCTGA

Clone variation with respect to NM_000274.3
1134 c=>t
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View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000274 unedited
ACTAATTTGTAATACGACCTCACTATAGGGCGGCCGCGAATTCGCACGAGGCCCGGTTGT
CCTCAGGCGCTGTCAGATCTGTGGTTTTTCTACTTGAAGGACACAATGTTTTCCAAACTA
GCACATTTGCAGAGGTTTGCTGTACTTAGTCGCGGAGTTCATTCTTCAGTGGCTTCTGCT
ACATCTGTTGCAACTAAAAAACAGTCCAAGGCCCTCCAACCTCTGATGACATTTTTGAAA
GGGAATATAAGTATGGTGCACACAACTACCATCCTTTACCTGTAGCCCTGGAGAGAGGAA
AAGGTATTTACTTATGGGATGTAGAAGGCAGAAAATATTTTGACTTCCTGAGTTCTTACA
GTGCTGTCAACCAAGGGCATTGTCACCCCAAGATTGTGAATGCTCTGAAGAGTCAAGTGG
ACAAATTGACCTTAACATCTAGAGCTTTCTATAATAACGTACTTGGTGAATATGAGGAGT
ATATTACTAAACTTTTCAACTACCACAAAGTTCTTCCTATGAATACAGGAGTGGAGGCTG
GAGAGACTGCCTGTAAACTAGCTCGTAAGTGGGGCTATACCGTGAAGGGCATTCAGAAAT
ACAAAGCACAGATTGTTTTTGCAGCTGGGAACTTCTGGGGTAGGACGTTGTCTGCTATCT
CCAGTTCCACAGACCCAACCAGTTACGATGGTTTTGGACCATTTATGCCCGGATTCGACA
TCATTCCCTCATATGATCTTGCCGCACCTGGACGTGCTCTCTACGATCCAAAAGTGGCTG
CGTTCATGGTAGAACCATTCAGGGTGAAACAGGCGTTGTTGCTCCGGACCAGTTACCTAA
TGGGGTGCGAGAGCTCTGCCCAGGCACCAGGTCTCTTATGCTGCGAATACAACAGAATGC
CAAACCGGGAAAGCTGCTGCGATCATAAAGGTCCACTGAATACCCTCTT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000274 unedited
CGCGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTGACATTTGAAATATAAGCT
TTATTTTAAATTTAAAGAAGTATTGAAAATAAACATTTTTTACAAATTATAATCAAGCAC
TCAAAACAATTTAGGAATGTTAAACACTAATTCTTAATTCAAAATAATGACATCCATAGA
ATACACTCCTGGTGTTGGCCAATATGAAGTTTACTTAATATTAGTATTTTATATACACTT
AACCATTAATCCTTCCTAAAATTCAATAACAATGATTTCACTTTATAAGATGAAGCCTTT
TATGCAATACCCAGAGATAACTTTTTCAAATATGAAACACTTATACCAGTGAGGAAATTA
TAAAAACATATATCAATTATACTGAAGGACTTGATTTAGAGGCTGTCTGTATATAGATGC
ATTTCACCTTAGGAAGTACACATGCACATCAAAACACTTCAACTGAATATAGATGCCATT
ACATTATTTAGTTACGTTACAAAGCAAACGGCAGGTTCATAAACGTTGTTCTATTATGTA
TCAACTGAAAAAATATATTCAAAAAAAAAGTTTTTGAAGACTCATGGGAGTGGAATGTGC
CCACATTANGAATAAAGCTTTTACAGGACCACCTGTCTCCAGCTGGCTCCAGGGACCACT
GAAAACAGCTGGCTACCCTCAGAAAGACAGATGGCCTTGTTAATAATTTCATGGACTCTC
GAAGCTCATCCTCCTTGATCACCAACGGAGGCGCAACCTGATTATGTCGNCATGGGTTGG
TTTGCCAGAAGTCCATATTCTCGAGTCGAAAAACACCTTCCAGCATCCCATTTTTGTTTT
CTTATGACAAACCATTAAAAACCTTTTCTTTTACGGAATTACAACTCGGAGGTACCTCCT
GAGT

Restriction Sites: NotI-NotI

ACCN: NM_000274

Insert Size: 2210 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_000274.1, NP_000265.1
RefSeq Size:	2013 bp
RefSeq ORF:	1320 bp
Locus ID:	4942
UniProt ID:	P04181
Cytogenetics:	10q26.13
Domains:	aminotran_3
Protein Families:	Druggable Genome
Protein Pathways:	Arginine and proline metabolism, Metabolic pathways
Gene Summary:	This gene encodes the mitochondrial enzyme ornithine aminotransferase, which is a key enzyme in the pathway that converts arginine and ornithine into the major excitatory and inhibitory neurotransmitters glutamate and GABA. Mutations that result in a deficiency of this enzyme cause the autosomal recessive eye disease Gyrate Atrophy. Alternatively spliced transcript variants encoding different isoforms have been described. Related pseudogenes have been defined on the X chromosome. [provided by RefSeq, Jan 2010] Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).