

Product datasheet for **SC328490**

ornithine aminotransferase (OAT) (NM_001171814) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ornithine aminotransferase (OAT) (NM_001171814) Human Untagged Clone
Tag:	Tag Free
Symbol:	OAT
Synonyms:	GACR; HOGA; OATASE; OKT
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001171814, the custom clone sequence may differ by one or more nucleotides

```
ATGAATACAGGAGTGGAGGCTGGAGAGACTGCCTGTAACTAGCTCGTAAGTGGGGCTAT
ACCGTGAAGGGCATTAGAAATACAAAGCAAAGATTGTTTTGACAGCTGGAACTTCTGG
GGTAGGACGTTGTCTGCTATCTCCAGTTCACAGACCCAACCAAGTTACGATGGTTTTGGA
CCATTTATGCCGGGATTCGACATCATTCCCTATAATGATCTGCCGCACTGGAGCGTGCT
CTTCAGGATCCAAATGTGGCTGCGTTCATGGTAGAACCAATTCAGGGTGAAGCAGGCGTT
GTTGTTCCGGATCCAGGTTACCTAATGGGAGTGCAGAGAGCTCTGCACCAGGCACCAGGTT
CTCTTTATTGCTGATGAAATACAGACAGGATTGGCCAGAAGTGGTAGATGGCTGGCTGTT
GATTATGAAAATGTCAGACCTGATATAGTCTCCTTGGAAAGGCCCTTTCTGGGGGCTTA
TACCCTGTGCTGCAGTGTGTGTGATGATGACATCATGCTGACCATTAAGCCAGGGGAG
CATGGGTCCACATACGGTGGCAATCCACTAGGCTGCCGAGTGGCCATCGCAGCCCTTGAG
GTTTTAGAAAGAAGAAAACCTTGCTGAAAATGCAGACAAATTGGGCATTATCTTGAGAAAT
GAACTCATGAAGTACCTTCTGATGTTGTAAGTCCCGTAAGAGGAAAAGGATTATTAAC
GCTATTGTCATTAAGAAACCAAGATTGGGATGCTTGGAAAGGTGTGCTACGACTTCGA
GATAATGGACTTCTGGCCAAGCCAACCCATGGCGACATTATCAGGTTTGGCCTCCGCTG
GTGATCAAGGAGGATGAGCTTCGAGAGTCCATTGAAATTATTAACAAGACCATCTGTCT
TTCTGA
```

Restriction Sites:	Please inquire
ACCN:	NM_001171814
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).



[View online »](#)

OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none">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:	<u>NM_001171814.1</u> , <u>NP_001165285.1</u>
RefSeq Size:	1874 bp
RefSeq ORF:	906 bp
Locus ID:	4942
UniProt ID:	<u>P04181</u>
Cytogenetics:	10q26.13
Protein Families:	Druggable Genome
Protein Pathways:	Arginine and proline metabolism, Metabolic pathways
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at a downstream start codon, compared to variant 1. The encoded isoform (2) is shorter than isoform 1.</p>