

Product datasheet for RC229852

ornithine aminotransferase (OAT) (NM_001171814) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ornithine aminotransferase (OAT) (NM_001171814) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OAT
Synonyms:	GACR; HOGA; OATASE; OKT
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC229852 representing NM_001171814 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTTTCCAACTAGCACATTTGCAGAGGTTTGTCTGACTTAGTCGCGGAGTTCATTCTTCAGTGGCTT
CTGCTACATCTGTTGCACTAAAAACAGTCCAAGGCCCTCAAACCTCTGATGACATTTTTGAAAGGGA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >RC229852 representing NM_001171814
 Red=Cloning site Green=Tags(s)

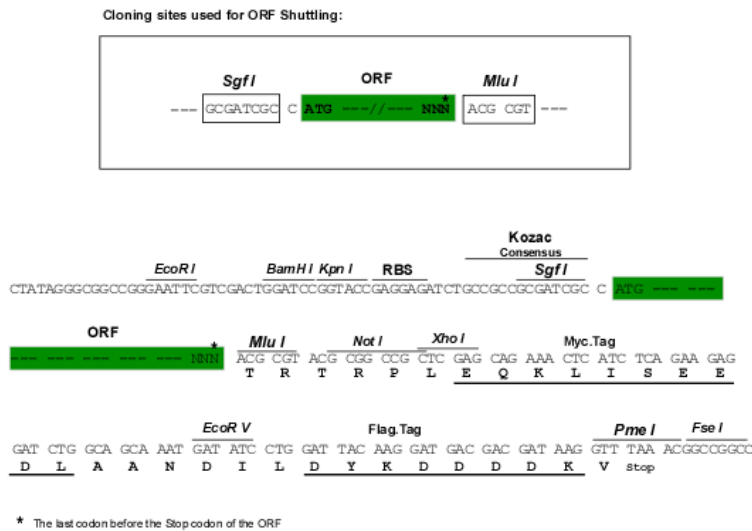
MFSKLAHLQRFVLSRGVHSSVASATSVATKKTVQGPPTSDDIFEREYKYGAHNYHPLPVALERGGKIYL
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 TGVEAGETACKLARKWGYTVKGIQYKAKIVFAAGNFWGRTLSAISSSTDPTSYDGFPGFMPGFDIIPYN
 DLPALERALQDPNVAAFMVEPIQGEAGVVVDPDGYLMGVRELCTRHQVLFIADEIQTGLARTGRWLAVDY
 ENVRPDI VLLGKALSGGLYPVSAVLCDDIMLTIKPEHGSTYGGNPLGCRVAIAALEVLEEENLAENAD
 KLGII LRNELMKLP SDVVTAVRGKLLNAIVIKETKDWD AWK VCLRLRDNGLLAKPTHGDIIRFAPPLVI
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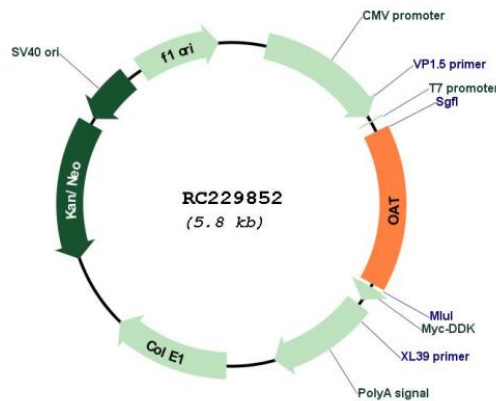
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001171814

ORF Size:	1320 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).
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:	NM_001171814.1 , NP_001165285.1
RefSeq Size:	1874 bp
RefSeq ORF:	906 bp
Locus ID:	4942
UniProt ID:	P04181
Cytogenetics:	10q26.13
Protein Families:	Druggable Genome
Protein Pathways:	Arginine and proline metabolism, Metabolic pathways
MW:	48.5 kDa
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]