

# Recombinant Human OAT

Cat. No. OAT-30516TH Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant OAT protein was expressed in E.coli and purified by using conventional chromatography techniques.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	33-439aa
<b>Description</b>	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.
<b>Form</b>	Liquid. 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol
<b>Molecular Mass</b>	45.2 kDa (408aa), confirmed by MALDI-TOF.
<b>AA Sequence</b>	MTVQGPPTSD DIFEREYKYG AHNYHPLPVA LERGKGIYLW DVEGRKYFDF LSSYSAVNQG HCHPKIVNAL KSQVDKLTLT SRAFYNNVLGEYEEYITKLF NYHKVLPMT GVEAGETACK LARKWGYTVK GIQKYKAKIV FAAGNFWGRT LSAISSSTDP TSYDGFPGPFM PGFDIIPYNDLPALERALQD PNVAAFMVEP IQGEAGVVVP DPGYLMGVRE LCTRHQVLFI ADEIQTGLAR TGRWLAVDYE

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

NVRPDIVLLG KALSGGLYPVSAVLCDDDDIM LTIKPGEHGS TYGGNPLGCR  
 VAIAALEVLE EENLAENADK LGIILRNELM KLPSDVVTAV RGKLLNAIV  
 IKETKDWDAAWKVCLRLRDNG LLAKPTHGDI IRFAPPLVIK EDELRESIEI INKTILSF

**Purity** > 90% by SDS - PAGE

**Storage** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

**Concentration** 1.0 mg/ml (determined by Bradford assay)

## GENE INFORMATION

**Gene Name** [OAT ornithine aminotransferase \[ Homo sapiens \(human\) \]](#)

**Official Symbol** OAT

**Synonyms**

ornithine aminotransferase; HOGA; OATASE; DKFZp781A11155; OAT; ornithine aminotransferase, mitochondrial; gyrate atrophy; ornithine-delta-aminotransferase; ornithine-oxo-acid aminotransferase; ornithine--oxo-acid aminotransferase; ornithine aminotransferase (gyrate atrophy); EC 2.6.1.13

**Gene ID** [4942](#)

**mRNA Refseq** [NM\\_000274](#)

**Protein Refseq** [NP\\_000265](#)

**MIM** [258870](#)

**UniProt ID** P04181

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



<b>Chromosome Location</b>	10q26
<b>Pathway</b>	Arginine and proline metabolism; Metabolic pathways; Metabolism of amino acids and derivatives
<b>Function</b>	ornithine-oxo-acid transaminase activity; pyridoxal phosphate binding

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA