

# Recombinant human OAT protein

Catalog Number: ATGP0458

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

33-439aa

### UniProt No.

P04181

### NCBI Accession No.

NP\_000265.1

### Alternative Names

ornithine aminotransferase precursor, DKFZp781A11155, HOGA, OATASE, ornithine aminotransferase precursor EC 2.6.1.13, ornithine aminotransferase (gyrate atrophy), ornithine aminotransferase precursor, Ornithine aminotransferase, mitochondrial precursor, Ornithine oxo-acid aminotransferase, Ornithine--oxo-acid aminotransferase.

## PRODUCT SPECIFICATION

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### Molecular Weight

45.2 kDa (408aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

### Purity

> 85% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

Non-Tagged

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

OAT, also known as mitochondrial enzyme ornithine aminotransferase, is a key enzyme in the pathway that

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converts arginine and ornithine into the major excitatory and inhibitory neurotransmitters glutamate and GABA. ( L-ornithine + a 2-oxo acid = L-glutamate 5-semialdehyde + an L-amino acid. ) Mutations that result in a deficiency of this enzyme cause the autosomal recessive eye disease Gyrate Atrophy. Recombinant OAT protein was expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

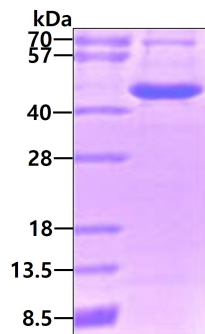
MTVQGPPTSD DIFEREYKYG AHNYHPLPVA LERGKGIYLW DVEGRKYFDF LSSYSAVNQG HCHPKIVNAL KSQVDKLTLT  
SRAFYNNVLG EYEEYITKLF NYHKVLPMT GVEAGETACK LARKWGYTVK GIQYKAKIV FAAGNFWGRT LSAISSSTDP  
TSYDGFPGPFM PGFDIIPYND LPALERALQD PNVAAFMVEP IQGEAGVVVP DPGYLMGVRE LCTRHQVLF ADEIQTGLAR  
TGRWLAVDYE NVRPDIIVLLG KALSGGLYPV SAVLCDDDIM LTIKPGEHGS TYGGNPLGCR VAIAALEVLE EENLAENADK  
LGIILRNELM KLPSDVVTAV RGKGLLNAIV IKETKDWDWA KVCLRLRDNG LLAKPETHGDI IRFAPPLVIK EDELRESIEI  
INKTILSF

## General References

Mitchell GA., et al. (1988) J. Biol. Chem. 263(28):14288-95.  
Shah SA., et al. (1997) Structure. 5(8):1067-75

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.