

# ornithine aminotransferase Rabbit pAb

ornithine aminotransferase Rabbit pAb Catalog # AP56924

#### **Product Information**

**Application** WB, IHC-P, IHC-F, IF

**Primary Accession** P04181

Reactivity Human, Mouse, Rat **Predicted** Chicken, Pig, Horse

Host Rabbit Clonality Polyclonal **Calculated MW** 48535 **Physical State** Liquid

KLH conjugated synthetic peptide derived from human ornithine **Immunogen** 

aminotransferase

351-439/439 **Epitope Specificity** 

Isotype IgG

affinity purified by Protein A **Purity** 

Buffer SUBCELLULAR LOCATION

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Mitochondrion matrix.

This product as supplied is intended for research use only, not for use in **Important Note** 

human, therapeutic or diagnostic applications.

**Background Descriptions** OAT (ornithine aminotransferase (mitochondrial), ornithine-oxo-acid

aminotransferase) is a 439 amino acid protein encoded by the human gene

OAT. OAT belongs to the class III pyridoxal-phosphate-dependent aminotransferase family and is usually found as a homotetramer in the mitochondrion matrix. OAT catalyzes the major catalytic reaction for ornithine. Ornithinemia, presumably due to deficiency of ornithine ketoacid

aminotransferase (OAT) has been found in patients with gyrate atrophy of the choroid and retina. The clinical history of gyrate atrophy is usually night blindness that begins in late childhood, accompanied by sharply demarcated circular areas of chorioretinal atrophy. During the second and third decades the areas of atrophy enlarge. The hepatic cleavage product, hepatic OAT, is formed by cleaving a 25 amino acid transit peptide from the N-terminus of the OAT precursor. The renal form is produced by cleaving a 35 amino acid

transit peptide from the N-terminus.

## **Additional Information**

Gene ID 4942

**Other Names** Ornithine aminotransferase, mitochondrial, 2.6.1.13, Ornithine

> delta-aminotransferase, Ornithine--oxo-acid aminotransferase, Ornithine aminotransferase, hepatic form, Ornithine aminotransferase, renal form, OAT

**Dilution** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

#### **Protein Information**

OAT Name

**Function** Catalyzes the reversible interconversion of L-ornithine and 2-oxoglutarate to

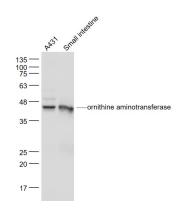
L-glutamate semialdehyde and L-glutamate.

Mitochondrion matrix **Cellular Location** 

# **Background**

OAT (ornithine aminotransferase (mitochondrial), ornithine-oxo-acid aminotransferase) is a 439 amino acid protein encoded by the human gene OAT. OAT belongs to the class III pyridoxal-phosphate-dependent aminotransferase family and is usually found as a homotetramer in the mitochondrion matrix. OAT catalyzes the major catalytic reaction for ornithine. Ornithinemia, presumably due to deficiency of ornithine ketoacid aminotransferase (OAT) has been found in patients with gyrate atrophy of the choroid and retina. The clinical history of gyrate atrophy is usually night blindness that begins in late childhood, accompanied by sharply demarcated circular areas of chorioretinal atrophy. During the second and third decades the areas of atrophy enlarge. The hepatic cleavage product, hepatic OAT, is formed by cleaving a 25 amino acid transit peptide from the N-terminus of the OAT precursor. The renal form is produced by cleaving a 35 amino acid transit peptide from the N-terminus.

### **Images**



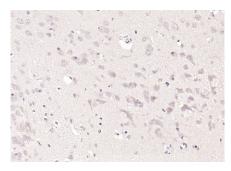
#### Sample:

A431(Human) Cell Lysate at 30 ug Small intestine (Mouse) Lysate at 40 ug Primary: Anti- ornithine aminotransferase (AP56924) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45 kD

Observed band size: 45 kD



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ornithine aminotransferase) Polyclonal Antibody, Unconjugated (AP56924) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.