

### **GOT1 Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2947B

## **Specification**

### **GOT1** Antibody (C-term) - Product Information

Application WB, IHC-P, FC,E

Primary Accession P17174

Other Accession P13221, P05201

Reactivity
Predicted
Host
Clonality
Isotype
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
352-381

## **GOT1** Antibody (C-term) - Additional Information

#### **Gene ID 2805**

### **Other Names**

Aspartate aminotransferase, cytoplasmic, cAspAT, Cysteine aminotransferase, cytoplasmic, Cysteine transaminase, cytoplasmic, cCAT, Glutamate oxaloacetate transaminase 1, Transaminase A, GOT1

## Target/Specificity

This GOT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 352-381 amino acids from the C-terminal region of human GOT1.

### **Dilution**

WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

GOT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **GOT1** Antibody (C-term) - Protein Information



## Name GOT1 (HGNC:4432)

**Function** Biosynthesis of L-glutamate from L-aspartate or L-cysteine (PubMed:21900944). Important regulator of levels of glutamate, the major excitatory neurotransmitter of the vertebrate central nervous system. Acts as a scavenger of glutamate in brain neuroprotection. The aspartate aminotransferase activity is involved in hepatic glucose synthesis during development and in adipocyte glyceroneogenesis. Using L-cysteine as substrate, regulates levels of mercaptopyruvate, an important source of hydrogen sulfide. Mercaptopyruvate is converted into H(2)S via the action of 3-mercaptopyruvate sulfurtransferase (3MST). Hydrogen sulfide is an important synaptic modulator and neuroprotectant in the brain. In addition, catalyzes (2S)-2- aminobutanoate, a by-product in the cysteine biosynthesis pathway (PubMed:27827456).

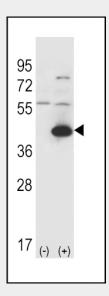
**Cellular Location** Cytoplasm.

# **GOT1** Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

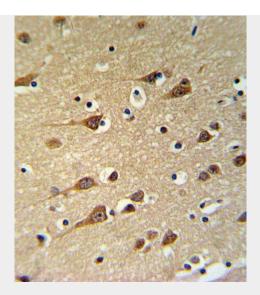
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# GOT1 Antibody (C-term) - Images

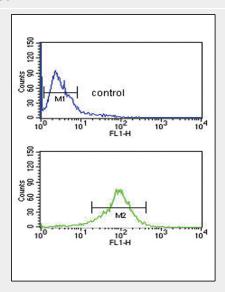


Western blot analysis of GOT1 (arrow) using rabbit polyclonal GOT1 Antibody (C-term) (Cat. #AP2947b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the GOT1 gene.





GOT1 Antibody (C-term) (Cat. #AP2947b) IHC analysis in formalin fixed and paraffin embedded brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the GOT1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



GOT1 Antibody (C-term) (Cat. #AP2947b) flow cytometric analysis of MDA-MB435 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# GOT1 Antibody (C-term) - Background

Glutamic-oxaloacetic transaminase is a pyridoxal phosphate-dependent enzyme which exists in cytoplasmic and mitochondrial forms, GOT1 and GOT2, respectively. GOT plays a role in amino acid metabolism and the urea and tricarboxylic acid cycles. The two enzymes are homodimeric and show close homology.

# **GOT1** Antibody (C-term) - References

Franke, A., et al. Nat. Genet. 42(4):292-294(2010) Barrett, J.C., et al. Nat. Genet. 41(12):1330-1334(2009) Campos, J., et al. Eur. J. Intern. Med. 20 (3), E53-E56 (2009)