

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

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2947A

### **Specification**

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

Application WB,E
Primary Accession P17174

Other Accession <u>Q4R5L1</u>, <u>P33097</u>, <u>P08906</u>

Reactivity Human, Mouse

Predicted Bovine, Horse, Monkey

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 46248
Antigen Region 5-33

## GOT1 Antibody (N-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 5-33 amino acids from the N-terminal region of human GOT1.

## **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### 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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **GOT1** Antibody (N-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).

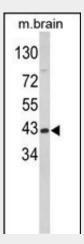
Cellular Location Cytoplasm.

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

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

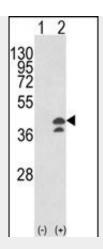
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## GOT1 Antibody (N-term) - Images

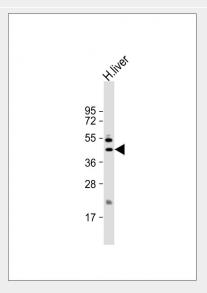


Western blot analysis of GOT1 Antibody (N-term) (Cat. #AP2947a) in mouse brain tissue lysates (35ug/lane). GOT1 (arrow) was detected using the purified Pab.





Western blot analysis of GOT1 (arrow) using rabbit polyclonal GOT1 Antibody (N-term) (Cat. #AP2947a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the GOT1 gene (Lane 2).



Anti-GOT1 Antibody (N-term) at 1:1000 dilution + human liver lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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

Panteghini, M. et.al,. Clin. Biochem. 23 (4), 311-319 (1990) Doyle, J.M., et.al., Biochem. J. 270 (3), 651-657 (1990)

## **GOT1 Antibody (N-term) - Citations**

 Metabolic reprogramming and Notch activity distinguish between non-small cell lung cancer subtypes.