10320 Camino Santa Fe, Suite G
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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	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**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

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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).

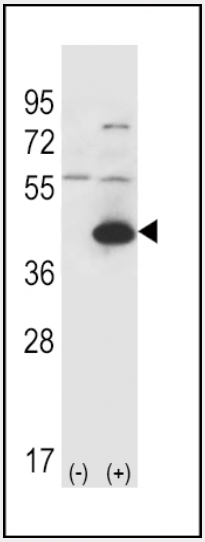
Cellular Location
Cytoplasm.

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
- Immunoprecipitation
- 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.

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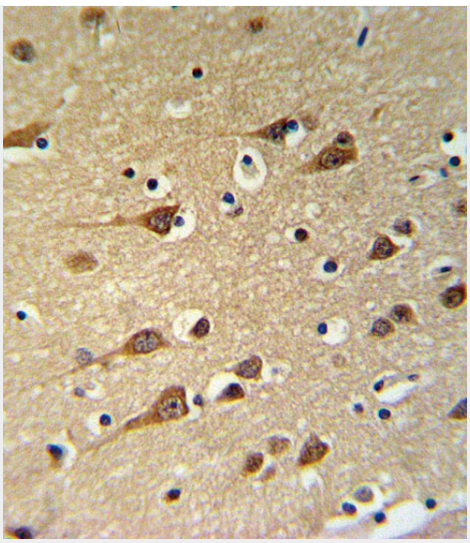
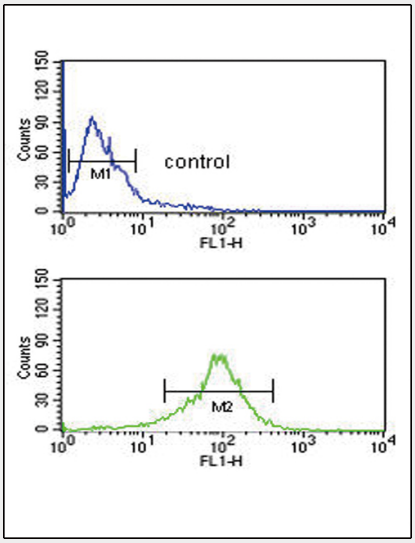


GOT1 Antibody (C-term) (Cat. #AP2947b) IHC analysis in formalin fixed and paraffin embedded brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the GOT1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been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