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GOT1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2947A

Product Information

Application	WB, E
Primary Accession	P17174
Other Accession	Q4R5L1, P33097
Reactivity	Human, Mouse
Predicted	Bovine, Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20729
Calculated MW	46248
Antigen Region	5-33

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.

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.

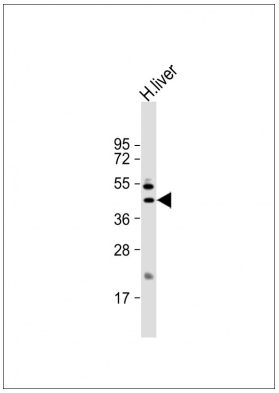
Background

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.

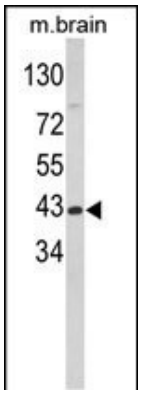
References

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

Images

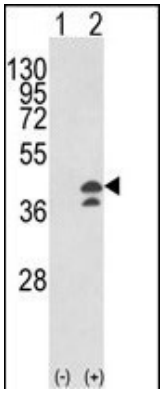


Anti-GOT1 Antibody (N-term) at 1:1000 dilution + human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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) .



Citations

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