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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, Rat, Canine, Rabbit, Chicken
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.

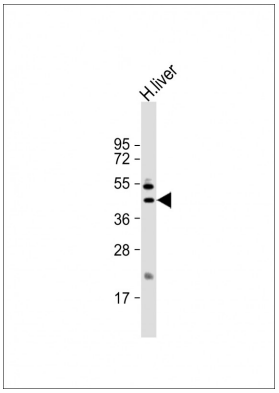
Background

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.

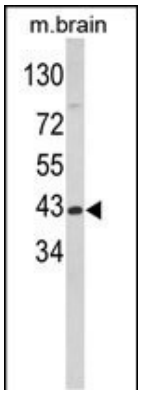
References

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

Images

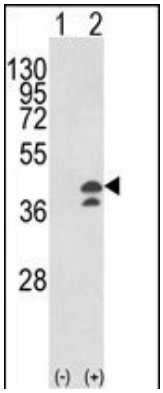


Anti-GOT1 Antibody (N-term) at 1:1000 dilution + human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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.

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