10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GOT1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51988

Product Information

Application	WB
Primary Accession	P17174
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46248

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
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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

Biosynthesis of L-glutamate from L-aspartate or L- cysteine. 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.

References

Bousquet-Lemercier B.,et al.Biochemistry 29:5293-5299(1990).
Wang C.Y.,et al.Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases.
Yu W.,et al.Submitted (MAR-1998) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Deloukas P.,et al.Nature 429:375-381(2004).