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Goat Anti-GOT1 (aa 157-167) Antibody

Peptide-affinity purified goat antibody
Catalog # AF1489a

Specification

Goat Anti-GOT1 (aa 157-167) Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P17174
Other Accession	NP_002070, 2805
Reactivity	**Human**
Predicted	**Rat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**46248**

Goat Anti-GOT1 (aa 157-167) Antibody - Additional Information

Gene ID 2805

Other Names
Aspartate aminotransferase, cytoplasmic, cAspAT, 2.6.1.1, 2.6.1.3, Cysteine aminotransferase, cytoplasmic, Cysteine transaminase, cytoplasmic, cCAT, Glutamate oxaloacetate transaminase 1, Transaminase A, GOT1

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-GOT1 (aa 157-167) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-GOT1 (aa 157-167) Antibody - 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.

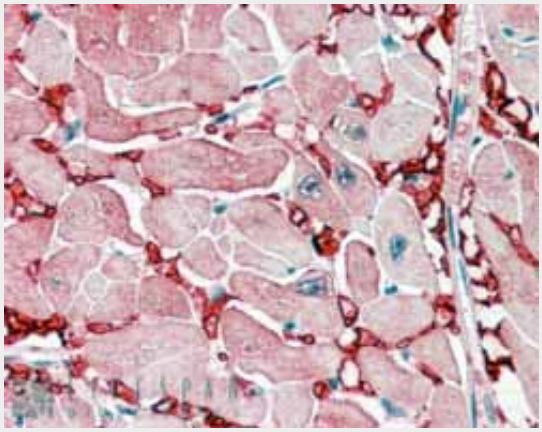
Goat Anti-GOT1 (aa 157-167) Antibody - Protocols

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

Goat Anti-GOT1 (aa 157-167) Antibody - Images

AF1489a (0.01 µg/ml) staining of Human Liver lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



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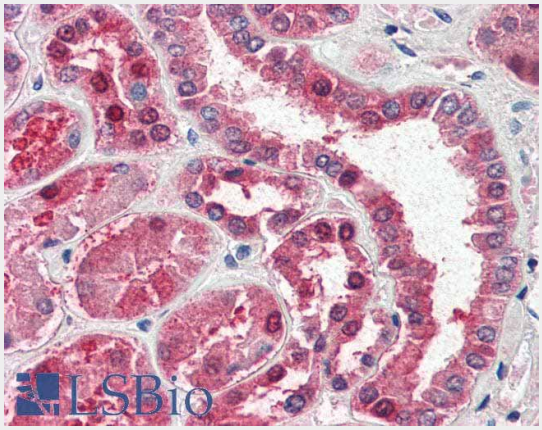
AF1489a (2.5 µg/ml) staining of paraffin embedded Human Heart. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



AF1489a (5 µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-GOT1 (aa 157-167) Antibody - 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.

Goat Anti-GOT1 (aa 157-167) Antibody - References

Genome-wide association study for ulcerative colitis identifies risk loci at 7q22 and 22q13 (IL17REL). Franke A, et al. Nat Genet, 2010 Apr. PMID 20228798.
Relation of coffee consumption and serum liver enzymes in Japanese men and women with reference to effect modification of alcohol use and body mass index. Ikeda M, et al. Scand J Clin Lab Invest, 2010 Apr 19. PMID 20205615.
Human variation in alcohol response is influenced by variation in neuronal signaling genes. Joslyn G, et al. Alcohol Clin Exp Res, 2010 May. PMID 20201926.
Genome-wide association study of ulcerative colitis identifies three new susceptibility loci, including the HNF4A region. UK IBD Genetics Consortium, et al. Nat Genet, 2009 Dec. PMID 19915572.
Abnormalities in aminotransferase levels during acute pyelonephritis. Campos J, et al. Eur J Intern Med, 2009 May. PMID 19393479.