

**Goat Anti-GOT1 (aa 157-167) Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1489a****Specification**

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

Application	WB, IHC, E
Primary Accession	<a href="#">P17174</a>
Other Accession	<a href="#">NP_002070</a> , <a href="#">2805</a>
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

**Dilution**

WB~~1:1000  
IHC~~1:100~500  
E~~N/A

**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:<a href="http://www.uniprot.org/citations/21900944" target="\_blank">21900944</a>). 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<sub>2</sub>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:<a href="http://www.uniprot.org/citations/27827456" target="\_blank">27827456</a>).

**Cellular Location**

Cytoplasm.

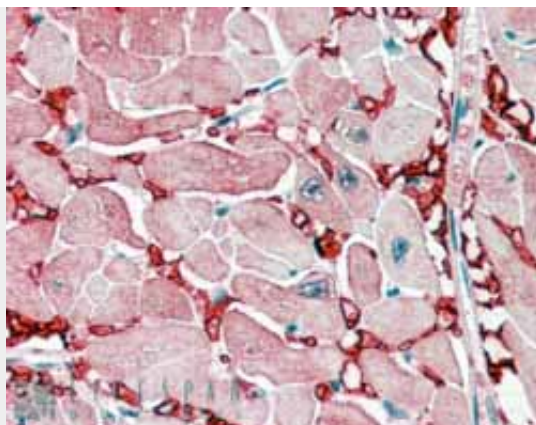
**Goat Anti-GOT1 (aa 157-167) Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

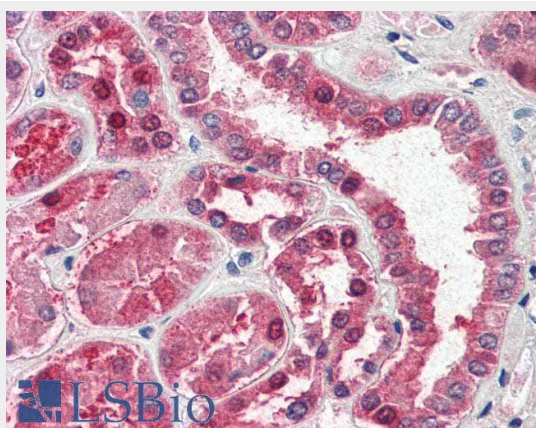
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**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.



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.