

**KD-Validated Anti-Glutamic-oxaloacetic transaminase 1 Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI1528****Specification****KD-Validated Anti-Glutamic-oxaloacetic transaminase 1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC
Primary Accession	<a href="#">P17174</a>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 46 kDa , observed, 47 kDa KDa
Gene Name	GOT1
Aliases	GOT1; Glutamic-Oxaloacetic Transaminase 1; Glutamate Oxaloacetate Transaminase 1; AST1; SGOT; AST; Glutamic-Oxaloacetic Transaminase 1, Soluble; Aspartate Aminotransferase, Cytoplasmic; Cysteine Aminotransferase, Cytoplasmic; Cysteine Transaminase, Cytoplasmic; Aspartate Aminotransferase 1; Aspartate Transaminase 1; Transaminase A; EC 2.6.1.1; CAspAT; CCAT; Glutamic-Oxaloacetic Transaminase 1, Soluble (Aspartate Aminotransferase 1); Testis Secretory Sperm-Binding Protein Li 196a; Growth-Inhibiting Protein 18; EC 2.6.1.3; ASTQTL1; GIG18
Immunogen	A synthesized peptide derived from human Aspartate Aminotransferase

**KD-Validated Anti-Glutamic-oxaloacetic transaminase 1 Rabbit Monoclonal Antibody - Additional Information**

Gene ID	2805
<b>Other Names</b>	
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 (<a href="http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=4432" target="_blank">HGNC:4432</a>)	

**KD-Validated Anti-Glutamic-oxaloacetic transaminase 1 Rabbit Monoclonal 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

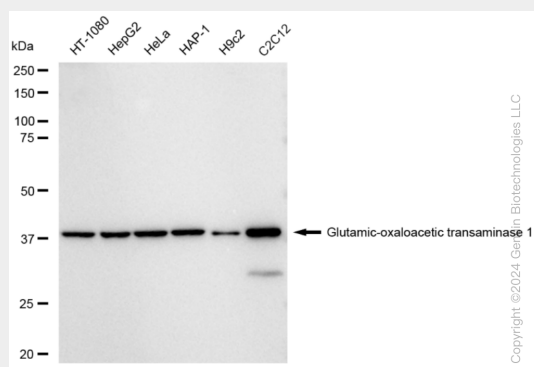
Cytoplasm.

## KD-Validated Anti-Glutamic-oxaloacetic transaminase 1 Rabbit Monoclonal Antibody - Protocols

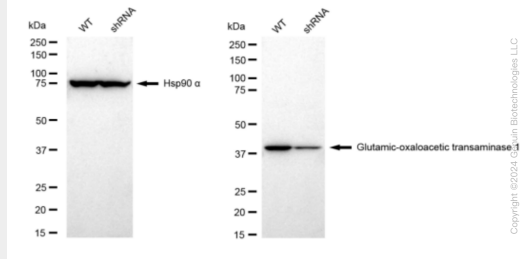
Provided below are standard protocols that you may find useful for product applications.

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

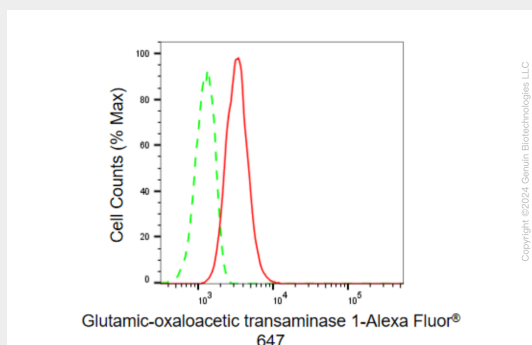
## KD-Validated Anti-Glutamic-oxaloacetic transaminase 1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Glutamic-oxaloacetic transaminase 1 antibody (Cat#62017). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Glutamic-oxaloacetic transaminase 1 antibody (Cat#62017, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ™ ECL Substrate Kit (Cat#226).



Western blotting analysis using anti-Glutamic-oxaloacetic transaminase 1 antibody (Cat#62017). Glutamic-oxaloacetic transaminase 1 expression in wild type (WT) and Glutamic-oxaloacetic transaminase 1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Glutamic-oxaloacetic transaminase 1 antibody (Cat#62017, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ™ ECL Substrate Kit (Cat#226).



Flow cytometric analysis of Glutamic-oxaloacetic transaminase 1 expression in C2C12 cells using Glutamic-oxaloacetic transaminase 1 antibody (Cat#62017, 1:2,000). Green, isotype control; red, Glutamic-oxaloacetic transaminase 1.