

DATASHEET

GOT1 Rabbit Polyclonal Antibody

CAT. NO. APA07031

KEY FEATURES

Target	GOT1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Bovine, Monkey	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

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. In addition, catalyzes (2S)-2-aminobutanoate, a by-product in the cysteine biosynthesis pathway .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:100
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to GOT1
Specificity	Recognizes endogenous levels of GOT1 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human GOT1. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 46 kD; Observed: 46 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	Aspartate aminotransferase, cytoplasmic; cAspAT; Cysteine aminotransferase, cytoplasmic; Cysteine transaminase, cytoplasmic; cCAT; Glutamate oxaloacetate transaminase 1; Transaminase A
Gene Symbol	GOT1
Entrez Gene	2805(Human); 14718(Mouse); 24401(Rat)
SwissProt	P17174(Human); P05201(Mouse); P13221(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

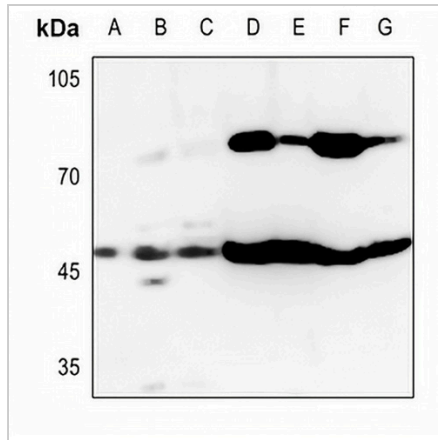
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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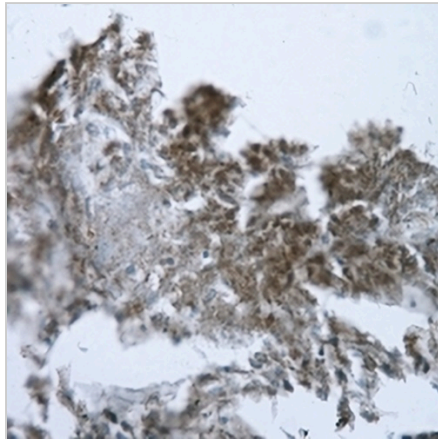
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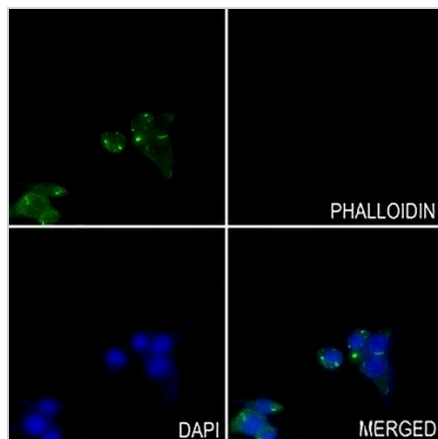
DATA



Western blot analysis of GOT1 expression in HEK293T (A), Hela (B), DLD (C), mouse heart (D), mouse brain (E), rat heart (F), rat brain (G) whole cell lysates. (Predicted band size: 46 kD; Observed band size: 46 kD)



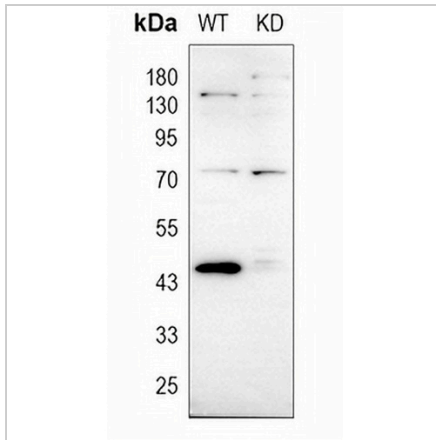
Immunohistochemical analysis of GOT1 staining in human colorectal cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of GOT1 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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DATA (CONTINUED)

Western blot analysis of GOT1 expression in wild type (WT) and knockdown (KD) HeLa cell lysates.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.