

Rabbit Aspartate Aminotransferase/GOT1 Polyclonal Antibody | anti-GOT1 antibody

Anti-Aspartate Aminotransferase/GOT1 Antibody

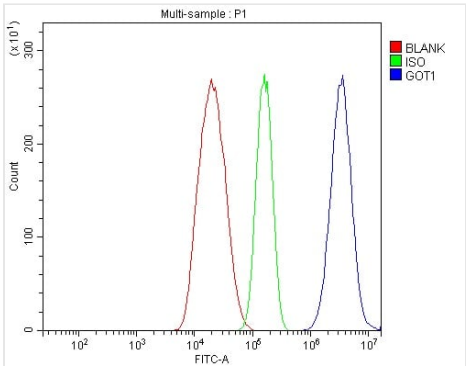
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125714	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Aspartate Aminotransferase/GOT1; Polyclonal Antibody; Anti-Aspartate Aminotransferase/GOT1 Antibody; GOT1; Aspartate aminotransferase; cytoplasmic; cAspAT; EC 2. 6. 1. 1; EC 2. 6. 1. 3; Cysteine aminotransferase; Cysteine transaminase; cCAT; Glutamate oxaloacetate transaminase 1; Transaminase A; glutamic-oxaloacetic transaminase 1; anti-GOT1 antibody

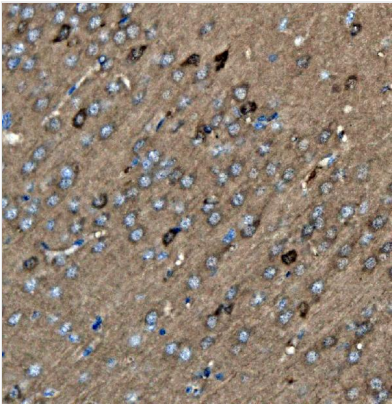
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Aspartate Aminotransferase/GOT1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-GOT1 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human Aspartate Aminotransferase/GOT1 recombinant protein (Position: S5-Q413).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



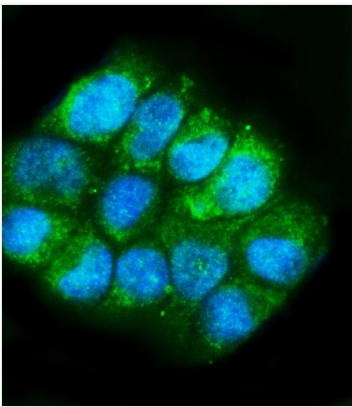
FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of HepG2 cells using anti-Aspartate Aminotransferase/GOT1 antibody (AAA125714).Overlay histogram showing HepG2 cells stained with AAA125714 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Aspartate Aminotransferase/GOT1 Antibody (AAA125714, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



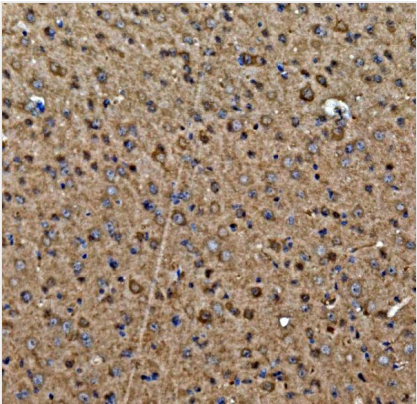
IHC (Immunohistochemisry)

Figure 3. IHC analysis of Aspartate Aminotransferase/GOT1 using anti-Aspartate Aminotransferase/GOT1 antibody (AAA125714).Aspartate Aminotransferase/GOT1 was detected in paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-Aspartate Aminotransferase/GOT1 Antibody (AAA125714) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



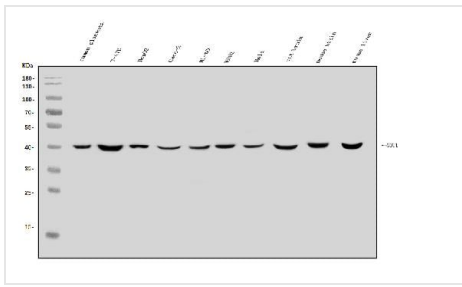
IF (Immunofluorescence)

Figure 4. IF analysis of Aspartate Aminotransferase/GOT1 using anti- Aspartate Aminotransferase/GOT1 antibody (AAA125714).Aspartate Aminotransferase/GOT1 was detected in immunocytochemical section of T-47D cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5μg/mL rabbit anti- Aspartate Aminotransferase/GOT1 Antibody (AAA125714) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohiostchemistry)

Figure 2. IHC analysis of Aspartate Aminotransferase/GOT1 using anti-Aspartate Aminotransferase/GOT1 antibody (AAA125714).Aspartate Aminotransferase/GOT1 was detected in paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-Aspartate Aminotransferase/GOT1 Antibody (AAA125714) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Aspartate Aminotransferase/GOT1 using anti-Aspartate Aminotransferase/GOT1 antibody (AAA125714). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions. Lane 1: human placenta tissue lysates Lane 2: human T-47D whole cell lysates Lane 3: human HepG2 whole cell lysates Lane 4: human Caco-2 whole cell lysates Lane 5: human HL-60 whole cell lysates Lane 6: human K562 whole cell lysates Lane 7: human Hela whole cell lysates Lane 8: rat brain tissue lysates Lane 9: mouse brain tissue lysates Lane 10: mouse liver tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Aspartate Aminotransferase/GOT1 antigen affinity purified polyclonal antibody (Catalog # AAA125714) at 0.25 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Aspartate Aminotransferase/GOT1 at approximately 41KD. The expected band size for Aspartate Aminotransferase/GOT1 is at 41KD.

ADDITIONAL INFORMATION

Related Product Information for anti-GOT1 antibody	Aspartate aminotransferase, cytoplasmic is an enzyme that in humans is encoded by the GOT1 gene. 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.
References	1. Aitken, D. A., Ferguson-Smith, M. A. Gene dosage evidence for the regional assignment of the GOT-S structural gene locus to 10q24-10q25. Cytogenet. Cell Genet. 22: 468-471, 1978. 2. Creagan, R., Tischfield, J., McMorris, F. A., Chen, S. -H., Hirschi, M., Chen, T. -T., Ricciuti, F., Ruddle, F. H. Assignment of the genes for human peptidase A to chromosome 18 and cytoplasmic glutamic oxaloacetate transaminase to chromosome 10 using somatic-cell hybrids. Cytogenet. Cell Genet. 12: 187-198, 1973. 3. Doonan, S., Barra, D., Bossa, F. Structural and genetic relationships between cytosolic and mitochondrial isoenzymes. Int. J. Biochem. 16: 1193-1199, 1984.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4504067
NCBI GeneID	2805
NCBI Accession #	NP_002070.1
NCBI GenBank Nucleotide #	NM_002079.2
UniProt Accession #	P17174 ; Q5VW80 ; B2R6R7 ; B7Z7E9
Molecular Weight	44,147 Da
NCBI Official Full Name	aspartate aminotransferase, cytoplasmic
NCBI Official Synonym Full Names	glutamic-oxaloacetic transaminase 1, soluble
NCBI Official Symbol	GOT1
NCBI Official Synonym Symbols	cCAT; GIG18; cAspAT; ASTQTL1

NCBI Protein Information	aspartate aminotransferase, cytoplasmic; aspartate aminotransferase 1; aspartate transaminase 1; cysteine aminotransferase, cytoplasmic; cysteine transaminase, cytoplasmic; glutamate oxaloacetate transaminase 1; growth-inhibiting protein 18; transaminase
UniProt Protein Name	Aspartate aminotransferase, cytoplasmic
UniProt Gene Name	GOT1
UniProt Synonym Gene Names	cAspAT; cCAT
UniProt Entry Name	AATC_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/aspartate-aminotransferase-got1-antibody-direct-elisa-flow-cytometry-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/125714>