Anti-GOT1 Antibody [A2D6-R] - BSA and Azide free

HA610154

Product Type:	Recombinant Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB
Molecular Wt:	Predicted band size: 46 kDa
Clone number:	A2D6-R

Description: 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 H2S via the action of 3-mercaptopyruvate sulfurtransferase (3MST). Hydrogen sulfide is an important synaptic modulator and neuroprotectant in the brain.

Immunogen: Recombinant protein within Human GOT1 aa 16-211 / 413.

Positive control: HeLa cell lysate, K-562 cell lysate, HL-60 cell lysate, Caco-2 cell lysate, human liver tissue lysate, mouse liver tissue lysate, mouse heart tissue lysate, rat liver tissue lysate, rat heart tissue lysate.

Subcellular location: Cytoplasm.

Database links: SwissProt: P17174 Human | P05201 Mouse | P13221 Rat

Recommended Dilutions:

WB	1:1,000

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

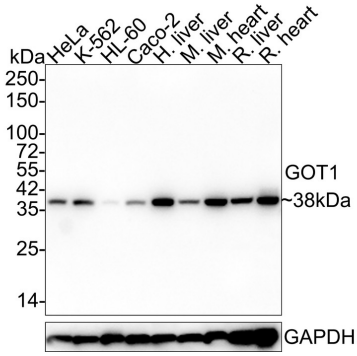

Fig1: Western blot analysis of GOT1 on different lysates with Mouse anti-GOT1 antibody (HA610154) at 1/1,000 dilution.

Lane 1: HeLa cell lysate (20 µg/Lane)
Lane 2: K-562 cell lysate (20 µg/Lane)
Lane 3: HL-60 cell lysate (20 µg/Lane)
Lane 4: Caco-2 cell lysate (20 µg/Lane)
Lane 5: Human liver tissue lysate (40 µg/Lane)
Lane 6: Mouse liver tissue lysate (40 µg/Lane)
Lane 7: Mouse heart tissue lysate (40 µg/Lane)
Lane 8: Rat liver tissue lysate (40 µg/Lane)
Lane 9: Rat heart tissue lysate (40 µg/Lane)

Lysates/proteins at 10 µg/Lane.

Predicted band size: 46 kDa
Observed band size: 38 kDa

Exposure time: 1 minute 41 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA610154) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

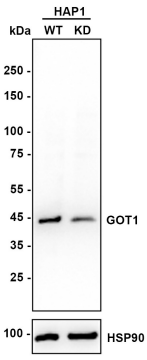

Fig2: Western blot analysis of GOT1 on different lysates with Mouse anti-GOT1 antibody (HA610154) at 1/1,000 dilution.

Lane 1: HAP1-parental cell lysate
Lane 2: HAP1-GOT1 KD cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 43 kDa
Observed band size: 43 kDa

Exposure time: 2 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA610154) at 1/1,000 dilution was used in K1803 at 4℃ overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Abrego J. et. al. GOT1-mediated anaplerotic glutamine metabolism regulates chronic acidosis stress in pancreatic cancer cells. Cancer Lett. 2017 Aug 1;400:37-46.
2. Hong C. et. al. Inhibition of GOT1 sensitizes colorectal cancer cells to 5-fluorouracil. Cancer Chemother Pharmacol. 2017 Apr;79(4):835-840.