Anti-Aspartate Aminotransferase Antibody [A2D6] EM1901-51

Product Type:	Mouse monoclonal IgG2b, primary antibodies
Species reactivity:	Human
Applications:	WB
Molecular Wt:	Predicted band size: 46 kDa
Clone number:	A2D6
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	1:500-1:2,000
Storage Buffer:	1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% SodiumAzide.
Storage Instruction:	Store at +4 $^\circ\!C$ after thawing. Aliquot store at -20 $^\circ\!C$. Avoid repeated freeze / thaw cycles.
Purity:	Protein G affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

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Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

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Images



Fig1: Western blot analysis of Aspartate Aminotransferase on different lysates with Mouse anti-Aspartate Aminotransferase antibody (EM1901-51) 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: 5 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 (EM1901-51) at 1/1,000 dilution was used in 5% NFDM/TBST at 4° C overnight Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

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.

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