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AGXT2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9834b

Product Information

Application	FC, WB, E
Primary Accession	Q9BYV1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23661
Calculated MW	57156
Antigen Region	437-463

Additional Information

Gene ID	64902
Other Names	Alanine--glyoxylate aminotransferase 2, mitochondrial, AGT 2, (R)-3-amino-2-methylpropionate--pyruvate transaminase, Beta-ALAAT II, Beta-alanine-pyruvate aminotransferase, D-AIBAT, AGXT2, AGT2
Target/Specificity	This AGXT2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 437-463 amino acids from the C-terminal region of human AGXT2.
Dilution	FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	AGXT2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	AGXT2
Synonyms	AGT2
Function	Multifunctional aminotransferase with a broad substrate specificity

(PubMed:20018850, PubMed:23023372, PubMed:24586340). Catalyzes the conversion of glyoxylate to glycine using alanine as the amino donor (By similarity). Catalyzes metabolism of not L- but the D- isomer of D-beta-aminoisobutyric acid to generate 2-methyl-3- oxopropanoate and alanine (PubMed:24586340). Catalyzes the transfer of the amino group from beta-alanine to pyruvate to yield L-alanine and 3- oxopropanoate (By similarity). Can metabolize NG-monomethyl-L-arginine (NMMA), asymmetric NG,NG-dimethyl-L-arginine (ADMA) and symmetric NG,N'G-dimethyl-L-arginine (SDMA) (PubMed:20018850, PubMed:23023372). ADMA is a potent inhibitor of nitric-oxide (NO) synthase, and this activity provides mechanism through which the kidney regulates blood pressure (PubMed:20018850, PubMed:23023372).

Cellular Location Mitochondrion

Tissue Location Expressed in the convoluted tubule in the kidney and in the liver hepatocytes (at protein level)

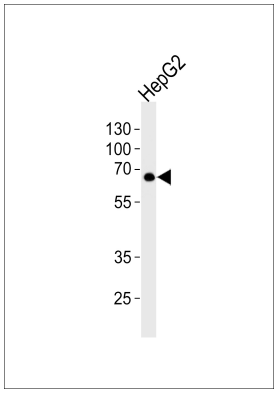
Background

The protein encoded by this gene is a class III pyridoxal-phosphate-dependent mitochondrial aminotransferase. It catalyzes the conversion of glyoxylate to glycine using L-alanine as the amino donor.

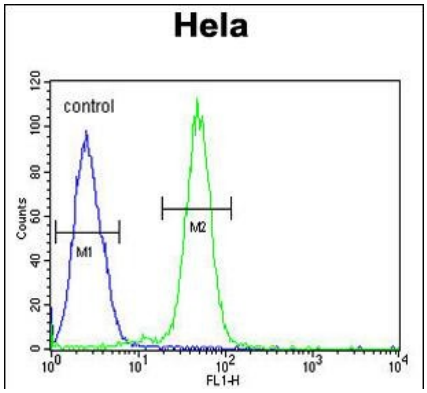
References

Rodionov, R.N., et al. J. Biol. Chem. 285(8):5385-5391(2010)
Baker, P.R., et al. Am. J. Physiol., Cell Physiol. 287 (5), C1359-C1365 (2004)

Images



Western blot analysis of lysate from HepG2 cell line, using AGXT2 Antibody (C-term)(Cat. #AP9834b). AP9834b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.



AGXT2 Antibody (C-term) (Cat. #AP9834b) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.