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ALDH7A1 Antibody

Rabbit mAb
Catalog # AP92867

Product Information

Application	WB, IHC
Primary Accession	P49419
Reactivity	Human
Clonality	Monoclonal
Other Names	ALDH7A1; Antiquitin; ATQ1; Betaine aldehyde dehydrogenase; EPD; PDE;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	58487

Additional Information

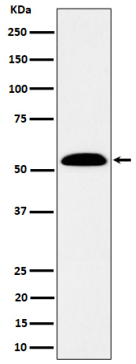
Dilution	WB 1:500~1:2000 IHC 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human ALDH7A1
Description	Multifunctional enzyme mediating important protective effects. Metabolizes betaine aldehyde to betaine, an important cellular osmolyte and methyl donor. Protects cells from oxidative stress by metabolizing a number of lipid peroxidation-derived aldehydes. Involved in lysine catabolism.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	ALDH7A1 {ECO:0000303|PubMed:21338592, ECO:0000312|HGNC:HGNC:877}
Function	Aldehyde dehydrogenase enzyme that mediates important protective effects (PubMed:16491085, PubMed:20207735, PubMed:20554659, PubMed:21338592, PubMed:25554827, PubMed:31302938, PubMed:31652343, PubMed:38604394, PubMed:40233740). Protects cells from oxidative stress by metabolizing a number of lipid peroxidation-derived aldehydes (PubMed:16491085, PubMed:20207735, PubMed:21338592, PubMed:40233740). Involved in cellular defense against hyperosmotic stress by metabolizing betaine aldehyde to betaine, an important cellular osmolyte and methyl donor (PubMed:20207735).
Cellular Location	[Isoform 1]: Mitochondrion
Tissue Location	Abundant in hepatoma cells and fetal cochlea, ovary, eye, heart, adrenal gland, liver and kidney. Low levels present in adult peripheral blood

leukocytes and fetal brain, thymus, spleen, skeletal muscle, lung and tongue.

Images



Western blot analysis of ALDH7A1 expression in SW480 cell lysate.

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