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ALDH7A1 Rabbit mAb

Catalog # AP75050

Product Information

Application	WB, IHC-P
Primary Accession	P49419
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	58487

Additional Information

Gene ID	501
Other Names	ALDH7A1
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

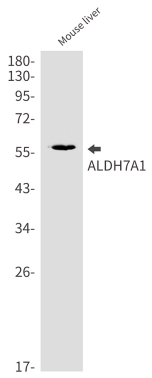
Name	ALDH7A1 {ECO:0000303|PubMed:21338592, ECO:0000312|HGNC:HGNC:877}
Function	Aldehyde dehydrogenase enzyme that mediates important protective effects (PubMed:16491085, PubMed:20207735, PubMed:20554659, PubMed:21338592, PubMed:25554827, PubMed:31302938, PubMed:31652343, PubMed:38604394, PubMed:40233740). 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.

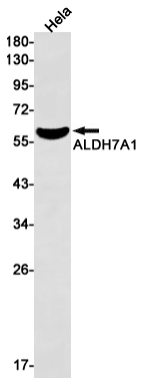
Background

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.

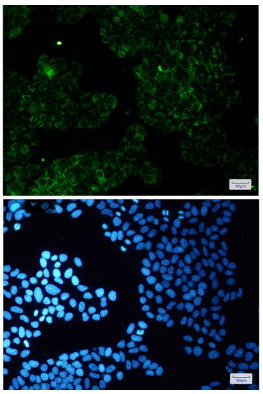
Images



Western blot analysis of ALDH7A1 in mouse liver lysates using ALDH7A1 antibody.



Western blot analysis of ALDH7A1 in Hela lysates using ALDH7A1 antibody.



Immunocytochemistry analysis of ALDH7A1(green) in Hela using ALDH7A1 antibody,and DAPI(blue)

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