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LAL Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1050a

Product Information

Application	WB, E
Primary Accession	P38571
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	9G7F12; 7G6D7
Isotype	IgG2a
Calculated MW	45419
Description	Lysosomal acid lipase (LAL), with 378-amino acid protein(43-54 kDa), functions in the lysosome to catalyze the hydrolysis of cholesteryl esters and triglycerides which are taken up by receptor-mediated endocytosis. An inherited deficiency or low activity of human lysosomal acid lipase results in the intralysosomal storage of the respective lipid substrates. So it is also responsible for the rare conditions of Wolman disease and cholesteryl ester storage disease (CESD). As the enzyme is synthesized by all nucleated cells, lipid-laden cells are found in all organs, particularly in liver, spleen, the adrenal and the hemopoietic system, and in the intestine as well as in the lymph nodes, lungs, testes, and ovaries.
Immunogen	Purified recombinant fragment of LAL expressed in E. Coli.
Formulation	Purified antibody in PBS containing 0.03% sodium azide.

Additional Information

Gene ID	3988
Other Names	Lysosomal acid lipase/cholesteryl ester hydrolase, Acid cholesteryl ester hydrolase, LAL, 3.1.1.13, Cholesteryl esterase, Lipase A, Sterol esterase, LIPA
Dilution	WB~~1/500 - 1/2000 E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	LAL Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LIPA
Function	Catalyzes the deacylation of cholesteryl ester core lipids of endocytosed low density lipoproteins to generate free fatty acids and cholesterol (PubMed:15269241, PubMed:1718995, PubMed:7204383, PubMed:8112342, PubMed:9633819). Hydrolyzes triglycerides (1,2,3- triacylglycerol) and diglycerides (such as 1,2-diacylglycerol and 1,3- diacylglycerol) with preference for the acyl moieties at the sn-1 or sn-3 positions (PubMed:7204383, PubMed:8112342).
Cellular Location	Lysosome {ECO:0000250|UniProtKB:Q64194}.
Tissue Location	Most abundantly expressed in brain, lung, kidney and mammary gland, a moderate expression seen in placenta and expressed at low levels in the liver and heart.

References

1. Uta Drebber, Matthias Andersen, Hans U Kasper, et al, World J Gastroenterol. 2005 Apr 21;11(15):2364-6.
2. Renata Boldrini, Rita Devito, R.Biselli,et al, Pathol Res Pract. 2004;200(3):231-40.

Images

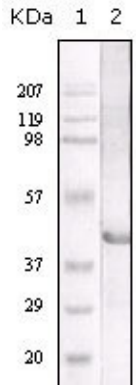


Figure 1: Western blot analysis using LAL mouse mAb against LAL recombinant protein.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.