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LCP1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18836c

Product Information

Application	WB, E
Primary Accession	P13796
Other Accession	Q61233, NP_002289.2
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB39488
Calculated MW	70288
Antigen Region	306-335

Additional Information

Gene ID	3936
Other Names	Plastin-2, L-plastin, LC64P, Lymphocyte cytosolic protein 1, LCP-1, LCP1, PLS2
Target/Specificity	This LCP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 306-335 amino acids from the Central region of human LCP1.
Dilution	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	LCP1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	LCP1
Synonyms	PLS2
Function	Actin-binding protein (PubMed: 16636079, PubMed:17294403,

	PubMed:28493397). Plays a role in the activation of T-cells in response to costimulation through TCR/CD3 and CD2 or CD28 (PubMed:17294403). Modulates the cell surface expression of IL2RA/CD25 and CD69 (PubMed:17294403).
Cellular Location	Cytoplasm, cytoskeleton. Cell junction. Cell projection. Cell projection, ruffle membrane {ECO:0000250|UniProtKB:Q61233, ECO:0000269|PubMed:16636079}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q61233}; Cytoplasmic side {ECO:0000250|UniProtKB:Q61233}. Note=Relocalizes to the immunological synapse between peripheral blood T-lymphocytes and antibody-presenting cells in response to costimulation through TCR/CD3 and CD2 or CD28 (PubMed:17294403). Associated with the actin cytoskeleton at membrane ruffles. Relocalizes to actin-rich cell projections upon serine phosphorylation (PubMed:16636079). {ECO:0000250|UniProtKB:Q61233, ECO:0000269|PubMed:16636079, ECO:0000269|PubMed:17294403}
Tissue Location	Detected in intestinal microvilli, hair cell stereocilia, and fibroblast filopodia, in spleen and other lymph node- containing organs. Expressed in peripheral blood T-lymphocytes, neutrophils, monocytes, B-lymphocytes, and myeloid cells

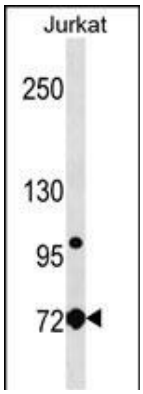
Background

Plastins are a family of actin-binding proteins that are conserved throughout eukaryote evolution and expressed in most tissues of higher eukaryotes. In humans, two ubiquitous plastin isoforms (L and T) have been identified. Plastin 1 (otherwise known as Fimbrin) is a third distinct plastin isoform which is specifically expressed at high levels in the small intestine. The L isoform is expressed only in hemopoietic cell lineages, while the T isoform has been found in all other normal cells of solid tissues that have replicative potential (fibroblasts, endothelial cells, epithelial cells, melanocytes, etc.). However, L-plastin has been found in many types of malignant human cells of non-hemopoietic origin suggesting that its expression is induced accompanying tumorigenesis in solid tissues.

References

Wabnitz, G.H., et al. Eur. J. Immunol. 40(9):2437-2449(2010)
Janji, B., et al. J. Cell. Mol. Med. 14 (6A), 1264-1275 (2010) :
Le Goff, E., et al. Cytoskeleton (Hoboken) 67(5):286-296(2010)
Al Tanoury, Z., et al. PLoS ONE 5 (2), E9210 (2010) :
Malhotra, A., et al. Diabetes Metab. Res. Rev. 25(8):740-747(2009)

Images



LCP1 Antibody (Center)(Cat. #AP18836c) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the LCP1 antibody detected the LCP1 protein (arrow).