

Mouse Anti-LBPA (BMP) Antibody

Z-PLBPA

Support: echelon@echelon-inc.com

Description:

Mouse monoclonal antibody targeting LBPA

Applications:

ELISA - 1:200
IF - 1:100^{1,2,3,4}
TLC overlay - 1:200

Other in vitro and cellular applications are possible using this antibody but have not been verified by Echelon Biosciences.

Properties:

Form – liquid
Storage instructions – Store at -20 °C for up to 60 days. A preservative such as sodium azide (final concentration, 0.02%) can be added if it will not interfere with specific applications, i.e. peroxidase activity. Aliquot and store at -20 or -70 °C if longer storage is necessary. Avoid repeated freeze/thaw cycles.
Storage buffer – PBS, pH 7.4
Concentration – see product label
Purity – affinity purified
Immunogen - synthetic LBPA
Clonality – monoclonal; clone 6C4
Isotype - IgGK₁

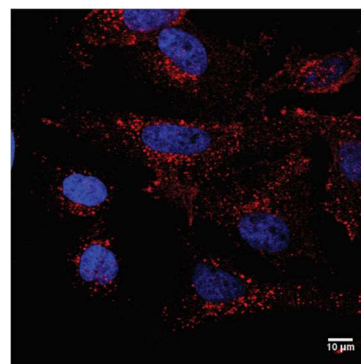
Specificity:

Z-PLBPA reacts primarily with the indicated lipid (of synthetic or natural origin), and cross-reactivity (CR) with other phospholipids, lysophospholipids, and proteins has not been detected. Some CR is possible with cardiolipin depending on assay format.

Background:

Lysobisphosphatidic acid (LBPA), also known as bis(monoacylglycerol)phosphate (BMP), is an important but unusual eukaryotic lipid, found primarily in late endosomes and is a cellular marker of this compartment. Further, LBPA is a lipid antigen for the autoimmune disorder, anti-phospholipid syndrome (APS).

Data: Immunofluorescence



HeLa cells were labeled with anti-LBPA as described in Kobayashi et al. 1999.

References:

- Rossaint J, Kuhne K, Skupski J, Van Aken H, Looney MR, Hidalgo A, et al. (2016) Directed transport of neutrophil-derived extracellular vesicles enables platelet-mediated innate immune response. *Nature Communications*. 7:13464.
- Ishikawa K, Nara A, Matsumoto K, Hanafusa H. (2012) EGFR-dependent phosphorylation of leucine-rich repeat kinase LRRK1 is important for proper endosomal trafficking of EGFR. *Mol Biol Cell*. 23(7):1294-306.
- Otomo, T., K. Higaki, et al. (2011). "Lysosomal Storage Causes Cellular Dysfunction in Mucopolipidosis II Skin Fibroblasts." *J Biol Chem* 286(40): 35283-90.
- Kobayashi, T., M. H. Beuchat, et al. (1999). "Late endosomal membranes rich in lysobisphosphatidic acid regulate cholesterol transport." *Nat Cell Biol* 1(2): 113-8.

Related Products:

Products	Catalog Number
Assays, Reagents, and Lipids	
(S,S) Bisoleoyl-lyso bisphosphatidic acid	L-B181
(S,S)-3,3'-Bisoleoyl-LBPA semi tetrabutylammonium salt	L-B182
Biotin-C12-ether LBPA	L-B1B12
LBPA Beads	P-BLBPA