Echelon Biosciences Inc.

Mouse Anti-PI(3)P Antibody

Z-P003

Support: echelon@echelon-inc.com

Description:
Mouse monoclonal antibody against PI(3)P

Applications:

ELISA - 1.0 ug/mL
Protein-lipid overlay – 1.0 ug/mL
IF/ICC – 5.0 ug/mL

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 4 °C for up to 30 days. Aliquot and store at -20 °C if longer storage is necessary. Avoid repeated freeze/thaw cycles.
Storage buffer – PBS, pH 7.4
Concentration – 1.0 mg/mL
Purity – affinity purified using Protein A Sepharose
Immunogen – PI(3)P conjugated to KLH
Clonality – monoclonal; clone 31-12-9
Isotype – IgG2a

Specificity:
Anti-PI(3)P reacts primarily with the head group of the indicated phosphoinositide (of synthetic or natural origin), but has some crossreactivity with other phosphoinositides depending on the assay format.)

Background:
Phosphoinositides (PIPns) are minor components of cellular membranes but are integral signaling molecules for cellular communication. Phosphatidylinositol 3-phosphate (PI(3)P) is enriched in early endosomes having roles in endosome fusion and receptor sorting and internalization in multivesicular bodies. PI(3)P has also been found at the plasma membrane and is involved in the translocation of the glucose transport protein GLUT4.

Data: Immunofluorescence

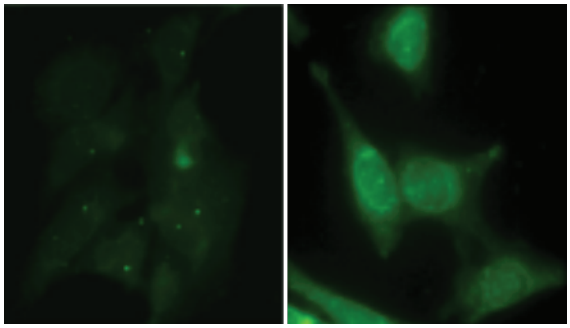

Image adapted with permission.
Confocal images of anti-PI(3)P stained cells untreated (left) or treated with insulin (right) prior to staining.

References:

1. Festa BP, Chen Z, Berquez M, Debaix H, Tokonami N, Prange JA, et al. (2018) Impaired autophagy bridges lysosomal storage disease and epithelial dysfunction in the kidney. Nat Commun. 9(1):161.

2. Bhattacharjee S, Coppens I, Mbengue A, Suresh N, Ghorbal M, Slouka Z, et al. (2018) Remodeling of the malaria parasite and host human red cell by vesicle amplification that induces artemisinin resistance. Blood. 131(11):1234-47.

3. Sabha N, Volpatti JR, Gonorazky H, Reifler A, Davidson AE, Li X, et al. (2016) PIK3C2B inhibition improves function and prolongs survival in myotubular myopathy animal models. The Journal of Clinical Investigation. 126(9).

Related Products:

Products	Catalog Number
Assays and Reagents	
Class III PI3K ELISA	K-3000
PI(3)P Shuttle PIP	P-9003
PI(3)P Mass ELISA	K-3300
Lipids	
PI(3)P	P-3008, P-3016
BODIPY FL,TMR PI(3)P	C-03F6, C-03M6

Echelon Biosciences Inc.
Ph: 866-588-0455
Fax: 801-588-0497
Echelon-inc.com