

Mouse Anti-PI(3,4,5)P₃ in ascites

Z-A345

Support: echelon@echelon-inc.com

Description:

Monoclonal mouse IgM antibody against PI(3,4,5)P₃ in ascites.

Applications:

IF/ICC – 1:50^{1,2,3}

IHC – 1:500

Lipid Protein Overlay and ELISA – not recommended

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 or -70 °C if longer storage is necessary. Avoid repeated freeze/thaw cycles.

Storage buffer – 0.01% thiomersal

Concentration – 2.7 mg/mL

Purity – ascites fluid

Immunogen - PtdIns(3,4,5)P₃ conjugated to BSA

Clonality – monoclonal; clone RC6F8

Isotype - IgM

Specificity:

Anti-PI(3,4,5)P₃ (ascites) has been shown to recognize PtdIns(3,4,5)P₃ in murine and human cells. Cross reactivity is 1% or less with other phosphatidylinositol phosphates or lipids.

Background:

PI(3,4,5)P₃ is generated by phosphorylation of PI(4,5)P₂ by PI3-kinases. Production of PI(3,4,5)P₃ at the plasma membrane is known to enhance association of PH domain containing proteins which facilitates G protein coupled receptor signaling cascades.

Data: Immunocytochemistry

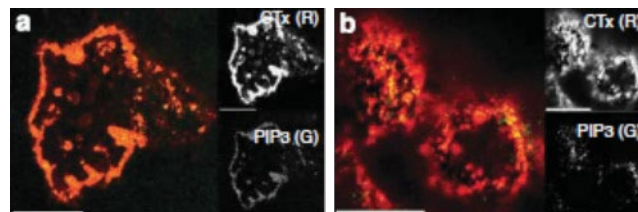


Image adapted with permission from Calay et al. 2010. PIP₃ staining shown in association with lipid rafts.

References:

1. Calay D, Vind-Kezunovic D, Frankart A, Lambert S, Poumay Y, Gniadecki R (2010) Inhibition of Akt Signaling by Exclusion from Lipid Rafts in Normal and Transformed Epidermal Keratinocytes. The Journal of Investigative Dermatology. 130(4):1136-45
2. Wu H, Shekar SC, Flinn RJ, El-Sibai M, Jaiswal BS, Sen KI, et al. (2009) Regulation of Class IA PI3-kinases: C2 domain iSH2 domain contacts inhibit p85/p110 α and are disrupted in oncogenic p85 mutants. PNAS ;106(48):20258-63.
3. Silva A, Yunes JA, Cardoso BA, Martins LR, Jotta PY, Abecasis M, (2008) et al. PTEN post-translational inactivation and hyperactivation of the PI3K/Akt pathway sustain primary T cell leukemia viability. J Clin Invest ;118(11):3762-74.

Related Products:

Products	Catalog Number
Assays and Enzymes	
PIP ₃ Mass ELISA	K-2500s
PI3-Kinase Activity ELISA	K-1000s
SHIP2 Enzyme	E-1000
PTEN Enzyme	E-3000
Lipids and Antibodies	
PI(3,4,5)P ₃	P-3908, P-3916, P-3924
Anti-PI(3,4,5)P ₃ antibodies	Z-P345b (purified IgG) Z-P345 (purified IgM) Z-G345 (Fl conjugate) Z-B345 (Biotin conjugate)