

Fluorescein (FITC) conjugated Anti-PI(4,5)P2 Antibody

Z-G045

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Description:

Fluorescein conjugated mouse antibody targeting PI(4,5)P2

Applications:

IF/ICC – 10-50 mg/mL
Flow Cytometry - 3.5 µg/mL
Lipid-Protein Overlay – 1.0 mg/mL
ELISA – 2.0 mg/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 – Protect from direct light and store at 4 °C for up to 30 days. For long term storage, aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
Storage buffer – PBS, pH 7.4
Concentration – See product label
Purity – affinity purified using anti-IgM chromatography
Immunogen – synthetic PI(4,5)P2
Clonality – monoclonal; clone 2C11
Isotype - IgM

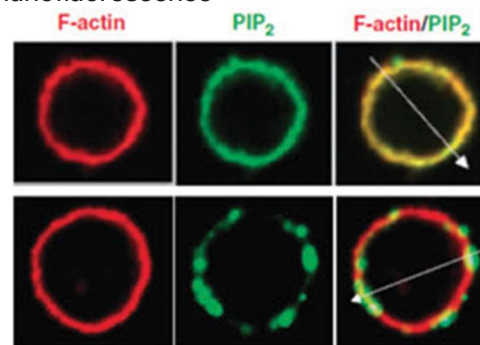
Specificity:

FITC Anti-PI(4,5)P2 reacts primarily with the head group of the indicated phosphoinositide, and demonstrates low cross-reactivity with other phosphoinositide or phospholipid depending on the assay format.

Background:

Phosphoinositides (PIPns) are minor components of cellular membranes but are integral signaling molecules for cellular communication. Phosphatidylinositol 4,5-bisphosphate (PIP2) has been shown to play a central role in a variety of cellular functions.

Data: Immunofluorescence



Images adapted with permission from Patsoukis et al. 2009. PI(4,5)P2 staining shown in green.

References:

- Gulshan K, Brubaker G, Conger H, Wang S, Zhang R, Hazen SL, et al. (2016) PI(4,5)P2 is translocated by ABCA1 to the cell surface where it mediates apolipoprotein A1 binding and nascent HDL assembly. *Circ Res.* 119(7):827-38
- Patsoukis N, Lafuente EM, Meraner P, Kim J, Dombkowski D, Li L, et al. (2009) RIAM regulates the cytoskeletal distribution and activation of PLC-gamma1 in T cells. *Sci Sig.* 2(99):ra79
- Heuvingsh J, Franco M, Chavrier P, Sykes C. (2007) RF1-mediated actin polymerization produces movement of artificial vesicles. *Proc Natl Acad Sci USA.* 104(43):16928-33
- Thomas CL, Steele J, Prestwich GD, Schiavo G. Generation of phosphatidylinositol-specific antibodies and their characterization. *Biochemical Society Transactions.* 1999;27:648-51.

Related Products:

Products	Catalog Number
Assays and Reagents	
PI(4,5)P2 Mass ELISA	K-4500
PI(4,5)P2 PIP Beads	P-B045
PTEN Inhibitor	B-0350s
Lipids and Antibodies	
PI(4,5)P2	P-4508, P-4516
Anti-PI(4,5)P2	Z-P045
Biotinylated Anti-PI(4,5)P2	Z-B045