Mouse Anti-PI(3,4,5)P₃ Antibody
Z-P345

Support: echelon@echelon-inc.com

**Description:**
Mouse monoclonal IgM antibody targeting PI(3,4,5)P₃

**Applications:**
- ELISA – 5.0 ug/mL
- IF/ICC² – 20 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 or -70 °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
- **Immunogen:** PI(3,4,5)P₃ conjugated to BSA
- **Clonality:** monoclonal
- **Isotype:** IgM

**Specificity:**
Z-P345 reacts primarily with the head group of the indicated phosphoinositide and demonstrates low cross-reactivity with other phosphoinositides or phospholipids depending on the assay format.

**Background:**
Phosphoinositides (PIPs) are minor components of cellular membranes but are integral signaling molecules for cellular communication. Phosphatidylinositol 3,4,5-trisphosphate (PI(3,4,5)P₃), formed from PI(4,5)P₂ though phosphorylation by PI 3-kinase, activates numerous signaling pathways resulting in cell proliferation, growth, survival, glucose transport and protein synthesis. High PIP3 levels from disregulation of PI3-K have been demonstrated in cancer and inflammatory diseases. PI(3,4,5)P₃ is hydrolyzed by the phosphatases PTEN to PI(4,5)P₂ and SHIP to PI(3,4)P₂.

**Data:** Immunofluorescence

![Immunofluorescence Image](image adapted with permission, Chen et al. IF of PI(3,4,5)P₃ in gastric cancer cells.)

**References:**

**Related Products:**

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