**Product Name:** **PI(3,5)$P_2$ Shuttle PIP™ Kit**

**Product Number:** **P-9035**

**Kit Contents:**

*Phosphoinositides*

| Catalog # | Description | Molecular Weight | *Quantity* |
|---|---|---|---|
| P-3516 | PtdIns(3,5)$P_2$ di-$C_{16}$ | 1,080.9 | 100 µg |
| C-35F6 | BODIPY® FL-PtdIns(3,5)$P_2$* | 1,513.6 | 50 µg |

*Carriers*

| | | | |
|---|---|---|---|
| P-9C1 | Neomycin Sulfate | 909 | 50 nmoles |
| P-9C1R | Neomycin-TMR** | 1,326 | 10 nmoles |
| P-9C2 | Histone H1 | ~26,230 | 50 nmoles |
| P-9C2R | Histone H1-TMR** | ~26,730 | 10 nmoles |
| P-9C3 | Carrier 3 | 1,551 | 50 nmoles |

**Storage and Handling:** Certain kit components are moisture and light sensitive. Store unopened kit for up to one year frozen at -20 °C and protected from moisture and light. Reconstitute phosphoinositides and carriers in aqueous buffers or media for use. Reconstituted phosphoinositides and carriers should not be stored at 4 °C for longer than 2-3 days. Samples may be frozen and stored at -20 °C for up to three months. Avoid multiple freeze-thaw cycles.

Note: Vortex mixing, brief bath sonication and addition of small amounts of methanol, ethanol, or DMSO may facilitate complete dissolution of phosphoinositides. *We do not recommend storing carriers and PIPs together as complexes.* On first use, we recommend subdividing carriers into convenient aliquots and storing at -20 °C until the day of use. Working stocks can be stored at 4 °C for 2-3 days.

**Selected References:**


1. Ozaki, S., DeWald, D. B., Shope, J. C., Chen, J., Prestwich, G. D. (2000) Intracellular delivery of phosphoinositides and inositol phosphates using polyamine carriers. *Proc Natl Acad Sci* U S A **97**, 11286-11291.

2. Weiner, O.D., Neilsen, P.O., Prestwich, G.D., Kirschner, M.W., Cantley, L.C. and Bourne, H.R. (2002). A PtdIns$P_3$- and Rho GTPase-mediated positive feedback loop regulates neutrophil polarity. *Nat Cell Biol* **4**, 509-512.

3. Larsen, M., Hoffman, M.P., Sakai, T., Neibaur, J.C., Mitchell, J.M., and Yamada, K.M. (2003) Role of PI 3-kinase and $PIP_3$ in submandibular gland branching morphogenesis, *Dev Biol*, **255**, 178-91.

4. Wang, Y. J., Li, W. H., Wang, J., Xu, K., Dong, P., Luo, X., and Yin, H. L. (2004) Critical role of PIP5KI 87 in Ins$P_3$-mediated Ca(2+) signaling, *J Cell Biol,* **167**, 1005.

5. Kanda, H., Tamori, Y., Shinoda, H., Yoshikawa, M., Sakaue, M., Udagawa, J., Otani, H., Tashiro, F., Miyazaki, J., and Kasuga, M. (2005) Adipocytes from Munc18c-null mice show increased sensitivity to insulin-stimulated GLUT4 externalization, *J Clin Invest,* **115,** 291-301.

6. Martin-Belmonte F, Gassama A, Datta A, Yu W, Rescher U, Gerke, V., Mostov, K. (2007) PTEN-Mediated Apical Segregation of Phosphoinositides Controls Epithelial Morphogenesis through Cdc42. *Cell* **128,** 383-397.

7. Leshem Y, Seri L, Levine A., (2007) Induction of phosphatidylinositol 3-kinase-mediated endocytosis by salt stress leads to intracellular production of reactive oxygen species and salt tolerance. *Plant J* **51,**185-197.


***BODIPY® FL** has maximal excitation at 505 nm and maximal emission at 513 nm

****TMR** = Tetramethylrhodamine (maximal excitation at 555 nm, maximal emission 580 nm)






Ph: 866-588-0455 Fax: 801-588-0497 **echelon-inc.com**