

Product Name: PI(3,5)P₂ 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 PtdInsP₃- 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 PIP₃ 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 PIP5K1 87 in InsP₃-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)

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

Technical Data Sheet, Rev 9, 11/12/2025 – **For research use only.** Not intended for diagnostic or therapeutic use.