



For research use only
*Not intended or approved for
diagnostic or therapeutic use.*

Product Name: Shuttle PIP™ Carrier
Intracellular delivery of phosphoinositides

Product Number: P-9C3

Contents:

<u>Catalog #</u>	<u>Description</u>	<u>Molecular Weight</u>	<u>Quantity</u>
P-9C3	Unlabeled Carrier 3	1551.0	2 X 50 nmoles

Storage:

Carrier 3 is lyophilized. Protect from moisture and store at -20 °C until reconstituted. Reconstitute with water or other aqueous solutions and store at 4°C after reconstituting for up to 3 months. Multiple freeze thawing is not recommended. *Note: phosphate buffers are not recommended and may alter complex formation with phosphoinositides.* We do not recommend storing carriers and PIPs together as complexes.

Use:

Carriers are used to deliver phosphoinositide polyphosphates into living cells. This carrier has successfully delivered the following phosphoinositides into cells: PtdIns(3)P, PtdIns,(4)P, and PtdIns(5)P, and their fluorescent derivatives.

References:

1. Ozaki, S., DeWald, D.B., Shope, J.C., Chen, J., Prestwich, G.D. Intracellular delivery of phosphoinositides and inositol phosphates using polyamine carriers. *Proc Natl Acad Sci U S A* **97**, 11286-91 (2000).
2. Wang, Y.J., Wang, J., Sun, H.Q., Martinez, M., Sun, Y.X., Macia, E., Kirchhausen, T., Albanesi, J.P., Roth, M.G., Yin, H.L. Phosphatidylinositol 4 phosphate regulates targeting of clathrin adaptor AP-1 complexes to the Golgi. *Cell* **114**, 299-310 (2003).
3. Maffucci, T., Brancaccio, A., Piccolo, E., Stein, R.C., Falasca, M. Insulin induces phosphatidylinositol-3-phosphate formation through TC10 activation. *Embo J* **22**, 4178-89 (2003).

4. Larsen, M., Hoffman, M.P., Sakai, T., Neibaur, J.C., Mitchell, J.M., Yamada, K.M. Role of PI 3-kinase and PIP3 in submandibular gland branching morphogenesis. *Dev Biol* **255**, 178-91 (2003).
5. Weiner, O.D., Neilsen, P.O., Prestwich, G.D., Kirschner, M.W., Cantley, L.C., Bourne, H.R. A PtdInsP(3)- and Rho GTPase-mediated positive feedback loop regulates neutrophil polarity. *Nat Cell Biol* **4**, 509-13 (2002).