



Echelon Biosciences Inc.
675 Arapeen Drive, Suite 302
Salt Lake City, UT 84108
Telephone 866-588-0455
Fax 801-588-0497
echelon@echelon-inc.com
www.echelon-inc.com

Technical Data Sheet

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

Product Name: **TMR-labeled Carrier 2**
Intracellular delivery of phosphoinositides

<u>Catalog #</u>	<u>Description</u>	<u>Molecular Weight</u>	<u>Quantity</u>
P-9C2R	Histone H1-TMR*	~26,730	2 x 10 nmoles

Storage: Protect from moisture and light and store at -20 °C until reconstituted. Reconstitute with water or other aqueous solutions and store at 4°C in the dark 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.

Suggested use: Carriers are used to deliver phosphoinositide polyphosphates into living cells. This carrier has successfully delivered the following phosphoinositides into cells: PtdIns(4,5)P₂, PtdIns(3,4)P₂, PtdIns(3,4,5)P₃, 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).

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

Echelon Biosciences products are sold for research and development purposes only and are not for diagnostic use or to be incorporated into products for resale without written permission from Echelon Biosciences. Materials in this publication, as well as applications and methods and use, may be covered by one or more U.S. or foreign patents or patents pending. We welcome inquiries about licensing the use of our trademarks and technologies at busdev@echelon-inc.com.

TDS P-9C2R Rev: 4 (11/10/08)