



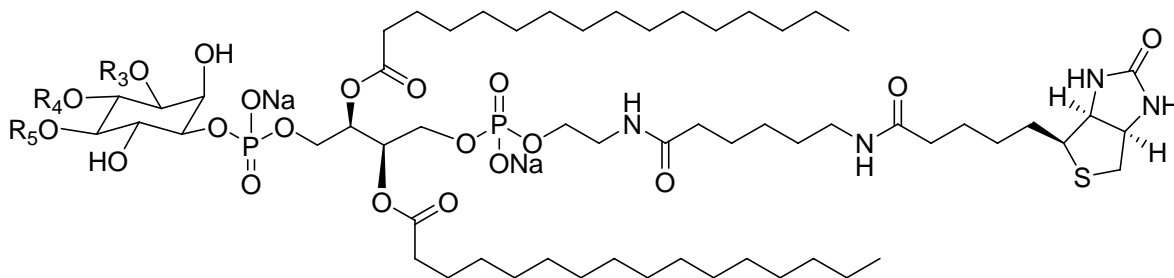
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## Technical Data Sheet

### For research use only

Not intended or approved for  
diagnostic or therapeutic use.

## Product Name: Biotin Hybrid-Phosphoinositides



Product	R <sub>3</sub>	R <sub>4</sub>	R <sub>5</sub>	Chemical Formula	MW (g/mol)
H-00BT	H	H	H	C <sub>60</sub> H <sub>110</sub> N <sub>4</sub> Na <sub>2</sub> O <sub>20</sub> P <sub>2</sub> S	1347.5
H-03BT	PO <sub>3</sub> Na <sub>2</sub>	H	H	C <sub>60</sub> H <sub>109</sub> N <sub>4</sub> Na <sub>4</sub> O <sub>23</sub> P <sub>3</sub> S	1471.5
H-34BT	PO <sub>3</sub> Na <sub>2</sub>	PO <sub>3</sub> Na <sub>2</sub>	H	C <sub>60</sub> H <sub>108</sub> N <sub>4</sub> Na <sub>6</sub> O <sub>26</sub> P <sub>4</sub> S	1595.4
H-45BT	H	PO <sub>3</sub> Na <sub>2</sub>	PO <sub>3</sub> Na <sub>2</sub>	C <sub>60</sub> H <sub>108</sub> N <sub>4</sub> Na <sub>6</sub> O <sub>26</sub> P <sub>4</sub> S	1595.4
H-39BT	PO <sub>3</sub> Na <sub>2</sub>	PO <sub>3</sub> Na <sub>2</sub>	PO <sub>3</sub> Na <sub>2</sub>	C <sub>60</sub> H <sub>107</sub> N <sub>4</sub> Na <sub>8</sub> O <sub>29</sub> P <sub>5</sub> S	1719.4

**Storage:** Hybrid Phosphatidylinositol polyphosphates (PtdInsP<sub>n</sub>s) and analogs are stable for at least one year when stored as a solid, protected from moisture, at -20 °C. Hybrid PtdInsP<sub>n</sub>s should be stored in glass containers or low-binding polypropylene tubes to prevent material loss due to absorption to the vessel surface. Storage in basic solutions (pH > 9) will result in slow hydrolysis of the ester chains, and may cause phosphate or acyl migration to occur. Storage in acidic buffers (pH < 4) may cause decomposition or phosphate migration. After reconstitution, solutions of PtdInsP<sub>n</sub>s should be flash frozen in liquid nitrogen and stored at -20 °C between uses. PtdInsP<sub>n</sub>s are stable for at least three months when handled in this way. Repeated freeze/thaw cycles do not affect PtdInsP<sub>n</sub>s. Do not store reconstituted PtdInsP<sub>n</sub>s, at 4 °C for more than 2-3 days.

**Reconstitution:** Reconstitute with water or neutral pH, buffered salt solutions, i.e. PBS, TBS, etc. Hybrid PtdInsP<sub>n</sub>s have very limited solubility in CHCl<sub>3</sub>-MeOH and other organic solvents, and are not recommended for preparing phospholipid liposomes.

**Suggested Use:** Phosphoinositides and synthetic analogs are employed as substrates for kinases, phosphatases, and binding proteins as described in many publications. Other *in vitro* and cellular applications are possible, but have not been verified by Echelon Biosciences. Please check our web site, [www.echelon-inc.com](http://www.echelon-inc.com), for updated technical or product application information; or call our customer service department at 1-866-588-0455.

**References:** P.W. Rzepecki and G.D. Prestwich (2002) Synthesis of hybrid lipid probes: derivatives of phosphatidylethanolamine-extended phosphatidylinositol 4,5-bisphosphate (Pea-PIP<sub>2</sub>). *J Org. Chem*, **67**, 5454.

R. Brunecky, S. Lee, P.W. Rzepecki, M. Overduin, G.D. Prestwich, A.G. Kutateladze, and T.G. Kutateladze, (2005) Investigation of the binding geometry of a peripheral membrane protein, *Biochemistry*, **44**, 16064.