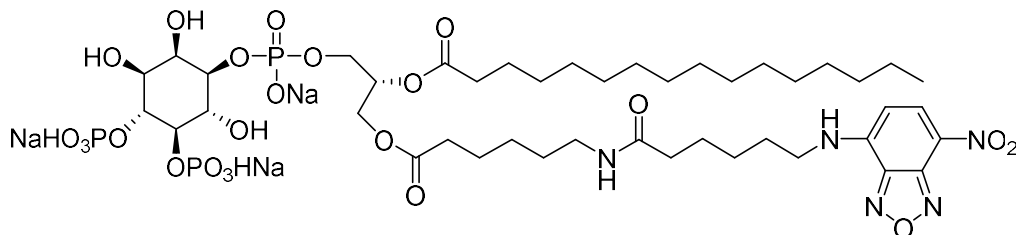


NBD PtdIns(4,5)P₂, C16

Catalog number: C-45N16



Molecular Formula: C₄₃H₇₁N₅Na₃O₂₃P₃

MW: 1187.94

CAS#: n/a

Excitation/emission: 463/539 nm

Solubility: water (>1 mg/mL)

Storage and Handling: Protect from light. Phosphatidylinositol polyphosphates (PtdInsP_ns) and analogs are stable for at least one year when stored as a solid, protected from moisture, at -20 °C or below. Longer-chain PtdInsP_ns should be stored in glass containers to prevent material loss due to absorption to the vessel surface. Storage in basic (pH > 9) or acidic (pH < 4) buffers may cause decomposition. Brief sonication and heating (~50 °C) can help longer chain PtdInsP_ns solubilize. After reconstitution, solutions of PtdInsP_ns should be stored at -20 °C or below. PtdInsP_ns are stable for at least three months when handled in this way. Repeated freeze/thaw cycles do not affect PtdInsP_ns. Do not store reconstituted PtdInsP_ns at 4 °C for more than 2-3 days.

Background: Phosphoinositides (PIPns) are minor components of cellular membranes but are integral signaling molecules for cellular communication. Phosphatidylinositol 4,5-bisphosphate (PIP2) has been shown to play a central role in a variety of cellular functions. Amongst its many functions, PIP2 is a substrate for Phospholipase C-coupled G-protein pathways involved in intracellular calcium release in several tissues. It is also a substrate for class I phosphoinositide 3-kinase (PI3-K) forming PI(3,4,5)P3.

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 1, 9/25/2024 – **For research use only.** Not intended for diagnostic or therapeutic use.