**Product Information**

**PtdIns-(4,5)-P\(_2\) (1,2-dioctanoyl) (sodium salt)**

*Item No. 64910*

**Formal Name:** 1-(1,2R-dioctanoylphosphatidyl)inositol-4,5-bisphosphate, trisodium salt

**Synonyms:** DOPI-4,5-P\(_2\), Phosphatidylinositol-4,5-bisphosphate C-8

**MF:** C\(_{25}\)H\(_{46}\)O\(_{19}\)P\(_3\) • 3Na

**FW:** 812.5

**Purity:** ≥97%

**Stability:** ≥1 year at -20°C

**Supplied as:** A lyophilized powder

**Laboratory Procedures**

For long term storage, we suggest that PtdIns-(4,5)-P\(_2\) (1,2-dioctanoyl) (sodium salt) be stored as supplied at -20°C. It should be stable for at least one year.

PtdIns-(4,5)-P\(_2\) (1,2-dioctanoyl) (sodium salt) is supplied as a lyophilized powder. For biological experiments, we suggest that organic solvent-free aqueous solutions of PtdIns-(4,5)-P\(_2\) (1,2-dioctanoyl) (sodium salt) be prepared by directly dissolving the lyophilized powder in aqueous buffers. It is miscible in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

The phosphatidylinositols (PtdIns) represent a small percentage of total membrane phospholipids. However, they play a critical role in the generation and transmission of cellular signals.\(^1\)\(^-\)\(^2\) PtdIns are a phosphorylated to mono- (PtdIns-P; PIP), di- (PtdIns-P\(_2\); PIP\(_2\)), and triphosphates (PtdIns-P\(_3\); PIP\(_3\)). Hydrolysis of PIP\(_2\) by PI-specific phospholipase C generates IP\(_3\) and diacylglycerol (DAG). The DAG and IP\(_3\) produced by this reaction are part of a complex biochemical and signal transduction cascade that is at the frontier of scientific research today.

**References**


**Related Products**

For a list of related products please visit: [www.caymanchem.com/catalog/64910](http://www.caymanchem.com/catalog/64910)

---

**WARNING:** This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

**MATERIAL SAFETY DATA**

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**

Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery. Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

Copyright Cayman Chemical Company, 02/14/2012