



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC Handels GmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic)



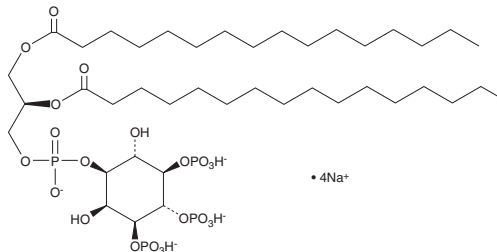
PRODUCT INFORMATION



PtdIns-(3,4,5)-P₃ (1,2-dipalmitoyl) (sodium salt)

Item No. 64920

CAS Registry No.: 1628353-02-5
Formal Name: D-myo-inositol 1-[(2R)-2,3-bis[(1-oxohexadecyl)oxy]propyl hydrogen phosphate] 3,4,5-tris (dihydrogen phosphate), tetrasodium salt
Synonyms: DPPI-3,4,5-P₃, Phosphatidylinositol-3,4,5-triphosphate C-16, PI(3,4,5)P₃ (16:0/16:0), PIP3[3',4',5'](16:0/16:0)
MF: C₄₁H₇₈O₂₂P₄ • 4Na
FW: 1,138.9
Purity: ≥98%
Supplied as: A lyophilized powder
Storage: -20°C
Stability: ≥5 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

PtdIns-(3,4,5)-P₃ (1,2-dipalmitoyl) (sodium salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the PtdIns-(3,4,5)-P₃ (1,2-dipalmitoyl) (sodium salt) in the solvent of choice, which should be purged with an inert gas. PtdIns-(3,4,5)-P₃ (1,2-dipalmitoyl) (sodium salt) has a solubility of approximately 3.8 mg/ml in a 2.5:3:1 solution of chloroform:methanol:water.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of PtdIns-(3,4,5)-P₃ (1,2-dipalmitoyl) (sodium salt) can be prepared by directly dissolving the lyophilized powder in aqueous buffers. The solubility of PtdIns-(3,4,5)-P₃ (1,2-dipalmitoyl) (sodium salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

The phosphatidylinositol phosphates 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-(3,4,5)-P₃ can serve as an anchor for the binding of signal transduction proteins bearing pleckstrin homology (PH) domains. Centaurin α and the Akt-family of GTPase activating proteins are examples of PtdIns-(3,4,5)-P₃-binding proteins.^{3,4} Protein-binding to PtdIns-(3,4,5)-P₃ is important for cytoskeletal rearrangements and membrane trafficking. PtdIns-(3,4,5)-P₃ is resistant to cleavage by PI-specific phospholipase C (PLC). Thus, it is likely to function in signal transduction as a modulator in its own right, rather than as a source of inositol tetraphosphates. For further reading on inositol phospholipids, see also references 5 and 6.

References

1. Lapetina, E.G., Billah, M.M., and Cuatrecasas, P. *Nature* **292**(5821), 367-369 (1981).
2. Majerus, P.W. *Annu. Rev. Biochem.* **61**, 225-250 (1992).
3. Tanaka, K., Imajoh-Ohmi, S., Sawada, T., et al. *Eur. J. Biochem.* **245**(2), 512-519 (1997).
4. Yang, X., Rudolf, M., Carew, M.A., et al. *J. Biol. Chem.* **274**(27), 18973-18980 (1999).
5. Pike, L.J. and Casey, L. *J. Biol. Chem.* **271**(43), 26453-26456 (1996).
6. Berridge, M.J. *Nature* **361**(6410), 315-325 (1993).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 09/21/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM