# PRODUCT INFORMATION



## Phosphatidylinositol (plant, soy) (sodium salt)

Item No. 24523

CAS Registry No.: 383907-36-6

MF:  $C_{45}H_{78}O_{13}P \bullet Na (for linoleoyl)$ 

FW: 881.1 **Purity:** ≥98%

Supplied as: A solution in chloroform

Storage: -20°C Stability: ≥2 years

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

#### **Laboratory Procedures**

Phosphatidylinositol (plant, soy) (sodium salt) is supplied as a solution in chloroform. To change the solvent, simply evaporate the chloroform under a gentle stream of nitrogen and immediately add the solvent of choice. Phosphatidylinositol (plant, soy) (sodium salt) is soluble in ethyl ether.

### Description

Phosphatidylinositols are glycerophospholipids that contain a glycerol backbone, two non-polar fatty acid tails, and a polar inositol head group. 1,2 They are synthesized from cytidine diphosphate diacylglycerol (CPD-DAG) and myoinositol by phosphoinositol synthase and represent approximately 10% of total cellular phospholipids. Phosphatidylinositols can be phosphorylated on their inositol rings to produce phosphoinositides, which have been implicated in calcium regulation, vesicle trafficking, mitogenesis, cell survival, and rearrangement of actin. This product contains glucosylceramide molecular species with primarily C16:0, C22:0, and C24:0 fatty acyl chain lengths. As this product is derived from a natural source, there may be variations in the sphingoid backbone.

### References

- 1. De Craene, J.-O., Bertazzi, D.L., Bär, S., et al. Phosphoinositides, major actors in membrane trafficking and lipid signaling pathways. Int. J. Mol. Sci. 18(3), E634 (2017).
- 2. Tolias, K.F. and Cantley, L.C. Pathways for phosphoinositide synthesis. Chem. Phys. Lipids 98(1-2), 69-77 (1999).

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

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

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, 11/28/2022

## **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