

# 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 HandelsgmbH

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 in



# PRODUCT INFORMATION



# Phosphatidylethanolamines (soy)

Item No. 25845

CAS Registry No.: 97281-51-1 PE (soy) Synonym: **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥2 years

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

#### **Laboratory Procedures**

Phosphatidylethanolamines (soy) is supplied as a solid. A stock solution may be made by dissolving the phosphatidylethanolamines (soy) in the solvent of choice. Phosphatidylethanolamines (soy) is soluble in the organic solvent chloroform, which should be purged with an inert gas.

### Description

Phosphatidylethanolamine is the most abundant phospholipid in prokaryotes and the second most abundant found in the membrane of mammalian, plant, and yeast cells, comprising approximately 25% of total mammalian phospholipids. In the brain, phosphatidylethanolamine comprises almost half of the total phospholipids. It is synthesized mainly through the cytidine diphosphate-ethanolamine and phosphatidylserine decarboxylation pathways, which occur in the endoplasmic reticulum (ER) and mitochondrial membranes, respectively. It is a precursor in the synthesis of phosphatidylcholine and arachidonoyl ethanolamide (AEA; Item No. 90050) and is a source of ethanolamine used in various cellular functions. In E. coli, phosphatidylethanolamine deficiency prevents proper assembly of lactose permease, suggesting a role as a lipid chaperone.<sup>2</sup> It is a cofactor in the propagation of prions in vitro and can convert recombinant mammalian proteins into infectious molecules even in the absence of RNA.3 Phosphatidylethanolamines (soy) is a mixture of phosphatidylethanolamines isolated from soy with various fatty acyl groups at the sn-1 and sn-2 positions.

## References

- 1. Vance, J.E. and Tasseva, G. Formation and function of phosphatidylserine and phosphatidylethanolamine in mammalian cells. Biochim. Biophys. Acta 1831(3), 543-554 (2013).
- 2. Bogdanov, M., Sun, J., Kaback, H.R., et al. A phospholipid acts as a chaperone in assembly of a membrane transport protein. J. Biol. Chem. 271(20), 11615-11618 (1996).
- 3. Deleault, N.R., Piro, J.R., Walsh, D.J., et al. Isolation of phosphatidylethanolamine as a solitary cofactor for prion formation in the absence of nucleic acids. Proc. Natl. Acad. Sci. U.S.A. 109(22), 8546-8551 (2012).

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

al 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, 10/17/2018

#### **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