

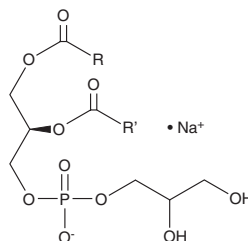
PRODUCT INFORMATION



Phosphatidylglycerol (egg) (sodium salt)

Item No. 25846

CAS Registry No.: 383907-64-0
Synonyms: PGs (egg),
L- α -Phosphatidylglycerols (egg)
Purity: $\geq 98\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years



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

Laboratory Procedures

Phosphatidylglycerol (egg) (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the phosphatidylglycerol (egg) (sodium salt) in the solvent of choice, which should be purged with an inert gas. Phosphatidylglycerol (egg) (sodium salt) is soluble in the organic solvent chloroform at a concentration of approximately 2 mg/ml.

Description

Phosphatidylglycerol is a naturally occurring anionic phospholipid and a constituent of plant, animal, and bacterial cell membranes.^{1,2} It is less abundant than phosphatidylethanolamine (Item Nos. 16878 | 24332) in prokaryotes and eukaryotes and phosphatidylcholine (Item Nos. 24343 | 24370) in eukaryotes. It is formed via a reaction between CDP-diglyceride with L- α -glycerol 3-phosphate followed by dephosphorylation and is a metabolic precursor of cardiolipin.¹ Phosphatidylglycerol species containing polyunsaturated and monounsaturated fatty acyl chains inhibit and promote proliferation of murine keratinocytes, respectively.³ Phosphatidylglycerol is the second largest lipid component of mammalian lung surfactant, comprising 10% of the lipids, and levels are decreased in the lung surfactant of infants with respiratory distress syndrome.² This product contains phosphatidylglycerol molecular species with variable fatty acyl chain lengths at the *sn*-1 and *sn*-2 positions.

References

- Ohtsuka, T., Nishijima, M., and Akamatsu, Y. A somatic cell mutant defective in phosphatidylglycerophosphate synthase, with impaired phosphatidylglycerol and cardiolipin biosynthesis. *J. Biol. Chem.* **268**(30), 22908-22913 (1993).
- Furse, S. Is phosphatidylglycerol essential for terrestrial life? *J. Chem. Biol.* **10**(1), 1-9 (2016).
- Xie, D., Seremwe, M., Edwards, J.G., et al. Distinct effects of different phosphatidylglycerol species on mouse keratinocyte proliferation. *PLoS One* **9**(9), e107119 (2014).

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

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