

# PRODUCT INFORMATION



## 1,2-Dipalmitoyl-*sn*-glycero-3-PS (sodium salt)

Item No. 15088

**CAS Registry No.:** 145849-32-7  
**Formal Name:** (2S,8R)-2-amino-5-hydroxy-11-oxo-8-[[1-(1-oxohexadecyl)oxy]-4,6,10-trioxo-5-phosphahexacosanoic acid, 5-oxide, monosodium salt

**Synonyms:** 1,2-Dipalmitoyl-*sn*-glycero-3-phospho-L-serine, DPPS, 1,2-DPPS

**MF:** C<sub>38</sub>H<sub>73</sub>NO<sub>10</sub>P • Na

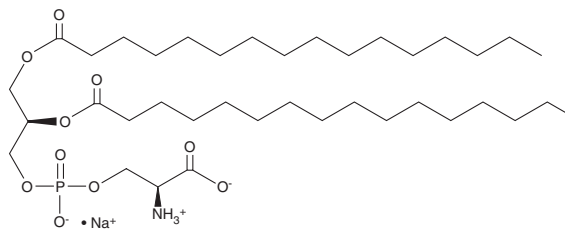
**FW:** 758.0

**Purity:** ≥98%

**Supplied as:** A crystalline 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

1,2-Dipalmitoyl-*sn*-glycero-3-PS (DPPS) (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the DPPS (sodium salt) in the solvent of choice, which should be purged with an inert gas. DPPS (sodium salt) is soluble in the organic solvent chloroform at a concentration of approximately 0.5 mg/ml.

### Description

Phosphatidylserine (PS) is an anionic phospholipid that is normally restricted to the inner leaflet of the plasma membrane bilayer of cells, appearing on the outer leaflet early in apoptosis and thus available for recognition by phagocytes.<sup>1,2</sup> DPPS is a form of PS that contains the abundant long-chain (16:0) palmitic acid inserted at the *sn*-1 and *sn*-2 positions. It is commonly used in the generation of liposomes and other types of artificial membranes.<sup>3,4</sup>

### References

1. Fadok, V.A., Bratton, D.L., Frasch, S.C., *et al.* The role of phosphatidylserine in recognition of apoptotic cells by phagocytes. *Cell Death Differ.* **5(7)**, 551-562 (1998).
2. Savill, J. Recognition and phagocytosis of cells undergoing apoptosis. *Br. Med. Bull.* **53(3)**, 491-508 (1997).
3. Shen, H.H., Crowston, J.G., Huber, F., *et al.* The influence of dipalmitoyl phosphatidylserine on phase behaviour of and cellular response to lyotropic liquid crystalline dispersions. *Biomaterials* **31(36)**, 9473-9481 (2010).
4. Marr, J.M., Li, F., Petlick, A.R., *et al.* The role of lateral tension in calcium induced DPPS vesicle rupture. *Langmuir* **28(32)**, 11874-11880 (2012).

#### 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.

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