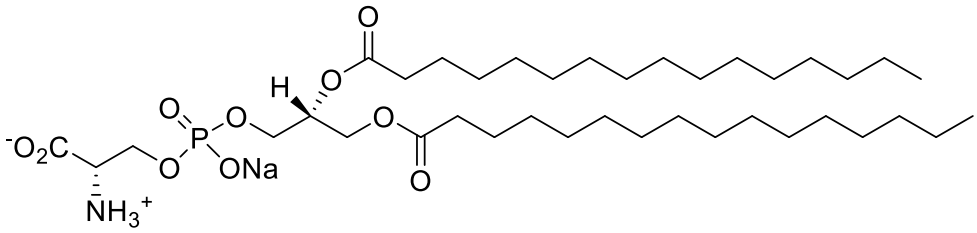
1,2-Dipalmitoyl-*sn*-glycero-3-phosphoserine, sodium salt (DPPS)

Catalog number: L-3116



Molecular Formula: $C_{38}H_{73}NNaO_{10}P$

MW: 757.96

CAS: 145849-32-7

Alternate Name: PS(16:0/16:0), Dipalmitoyl phosphatidylserine

Solubility: 65:25:4 $CHCl_3$:MeOH:H_2O, gentle heating (40-50 °C) may be required

Storage and Handling: Store dry at -20 °C. Stock solutions should be stored frozen (-20 °C or below).

Background: Phosphatidylserine (PS) is a negatively charged phospholipid located in the inner leaflet of the cell membrane. During apoptosis PS is no longer restricted to the inner leaflet of the plasma membrane and migrates to the outer leaflet. Recognition of extra-leaflet PS by Anexin V is the basis of popular apoptosis assays. Similarly, during platelet activation, PS is translocated to the outer side where it facilitates assembly of the prothrombinase complex.

References: 1) R.B. Birge, S. Boeltz, *et al.* (2016) "Phosphatidylserine is a global immunosuppressive signal in efferocytosis, infectious disease, and cancer" Cell Death and Differentiation, 23: 962-978.
2) H-Y Kim, *et al.* (2014) "Phosphatidylserine in the Brain: Metabolism and Function" Prog. Lipid Res. 0:1-18, doi:10.1016/j.plipres.2014.06.002
3) S-J Li. *Et al.* (2001) "Mechanism for phosphatidylserine-dependent erythrophagocytosis in mouse liver" Blood 117:5115-5223.
4) M. van Engeland, *et al.* (1998) "Annexin V-Affinity assay: A review on an apoptosis detection system based on phosphatidylserine exposure" Cytometry Part A. 31(1):1-9.

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

Echelon Biosciences Inc.
Ph: 866-588-0455
Fax: 801-588-0497
Echelon-inc.com