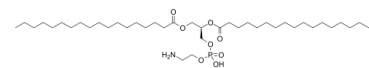


## Data Sheet

|                    |                                                    |
|--------------------|----------------------------------------------------|
| Product Name:      | 1,2-Distearoyl-sn-glycero-3-phosphorylethanolamine |
| Cat. No.:          | CS-0046318                                         |
| CAS No.:           | 1069-79-0                                          |
| Molecular Formula: | C41H82NO8P                                         |
| Molecular Weight:  | 748.07                                             |
| Target:            | Endogenous Metabolite                              |
| Pathway:           | Metabolic Enzyme/Protease                          |
| Solubility:        | 10 mM in DMSO                                      |



### BIOLOGICAL ACTIVITY:

1,2-Distearoyl-sn-glycero-3-phosphorylethanolamine (DSPE) is a phosphoethanolamine (PE) lipid that can be used in the synthesis of liposomes<sup>[1]</sup>. **In Vitro:** 1,2-Distearoyl-sn-glycero-3-phosphorylethanolamine (DSPE), one of many phosphoethanolamine (PE) lipids, cannot sustain a lamellar form at pH values below  $\approx 8.5$ , the pKa of the ethanolamine moiety<sup>[1]</sup>.

### References:

[1]. McCarley RL, et al. Redox-responsive delivery systems. *Annu Rev Anal Chem* (Palo Alto Calif). 2012;5:391-411.

### CAIndexNames:

Octadecanoic acid, 1,1'-[(1R)-1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl] ester

### SMILES:

CCCCCCCCCCCCCCCC(O[C@@H](COP(OCCN)(O)=O)COC(CCCCCCCCCCCCCCCC)=O)=O

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA