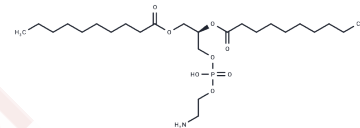


## 1,2-didecanoyl-sn-glycero-3-phosphoethanolamine

### Chemical Properties

|                   |   |
|-------------------|---|
| CAS No. :         | 253685-27-7   |
| Formula:          | C25H50NO8P  |
| Molecular Weight: | 523.64  |
| Storage:          | Powder: -20°C for 3 years   In solvent: -80°C for 1 year<br>Actual storage temperature shall be subject to the COA. |



### Biological Description

|               |  |
|---------------|--|
| Description   | 1,2-Didecanoyl-sn-glycero-3-phosphoethanolamine (DDPE) is a short-and medium-chain phosphatidylethanolamine composed of two C10 saturated fatty acids. Compared with long-chain lipids, it has higher membrane fluidity and lower phase transition temperature, and is often used to construct model membranes or liposome systems to regulate membrane fluidity and study the effects of lipid chain length on membrane physical properties and protein-membrane interaction. In addition, the activity of P-gp was affected at the concentration of 0.3 mM |
| Targets(IC50) | Liposome,P-gp  |

### Preparing Stock Solutions

|       | 1mg       | 5mg       | 10mg       |
|-------|-----------|-----------|------------|
| 1 mM  | 1.9097 mL | 9.5485 mL | 19.0971 mL |
| 5 mM  | 0.3819 mL | 1.9097 mL | 3.8194 mL  |
| 10 mM | 0.191 mL  | 0.9549 mL | 1.9097 mL  |
| 50 mM | 0.0382 mL | 0.191 mL  | 0.3819 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Simon S, Schubert R. Inhibitory effect of phospholipids on P-glycoprotein: cellular studies in Caco-2, MDCKII mdr1 and MDCKII wildtype cells and P-gp ATPase activity measurements. *Biochim Biophys Acta*. 2012;1821(9):1211-1223.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481