

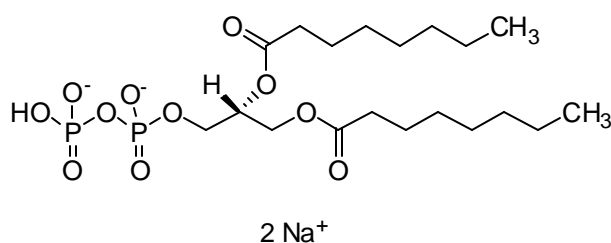
Product Information

Diacylglycerol pyrophosphate (8:0) disodium

Product Number **D 5442**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

Synonyms: 1,2-Dioctanoyl-sn-glycero-3-pyrophosphate;
DGPP (8:0)



Product Description

Molecular Formula: C₁₉H₃₆O₁₁P₂Na₂

Molecular Weight: 548.41

Diacylglycerol pyrophosphate (DGPP) (8:0) is a selective antagonist of the lysophosphatidic acid (LPA) subtypes LPA₁ and LPA₃ receptors, with an order of magnitude preference for LPA₃. It has no effect on LPA₂. DGPP (8:0) inhibited Ca²⁺ cellular responses elicited by LPA in NIH3T3 fibroblasts, HEY ovarian cancer cells, PC12 pheochromocytoma cells, and *X. laevis* oocytes expressing LPA₁ and LPA₃ but not LPA₂. Responses elicited by sphingosine-1-phosphate (S1P) in these same cell lines endogenously expressing S1P₁, S1P₂, S1P₃, or S1P₅ receptors were not affected by DGPP (8:0).

Inhibition curves in cells expressing LPA₁ and LPA₃ with increasing concentrations of DGPP (8:0) gave K_i values of 106 ± 28 nM for LPA₃ (Edg-7) and 6.6 ± 0.68 μM for LPA₁ (Edg-3).

DGPP (8:0) significantly inhibited the LPA-induced proliferation of NIH3T3 cells, reducing cell number to control levels, whereas it had no effect on solvent-treated control cells.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Not soluble in water and DMSO, slightly soluble in DMSO/Methanol ~1mg/mL

Storage/Stability

Store at $-20\text{ }^{\circ}\text{C}$

Reference

Fischer, D.J., et al., Short-chain phosphatidates are subtype-selective antagonists of lysophosphatidic acid receptors. *Mol. Pharmacol.* **60**, 776-784 (2001).

AH, PHC 02/05-1

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