

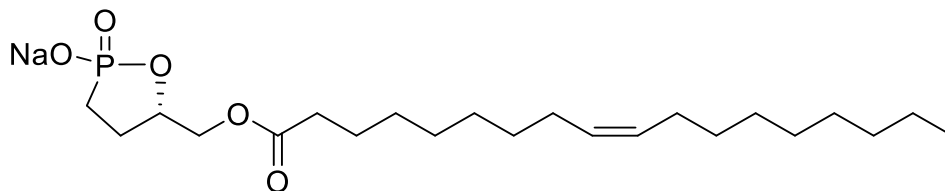
Oleoyl 3-carbacyclic Phosphatidic Acid

Catalog number: L-7218

Molecular Formula: $C_{22}H_{41}NaO_5P$

MW: 416.5

CAS: 779333-58-3



Alternate Name: Oleoyl-ccPA, 3-ccPA

Solubility: methanol > 1 mg/mL

Storage and Handling: Store dry at -20 °C. Stock solutions should be stored frozen (-20 °C or below). Storage in basic (pH > 9.0) or acidic (pH < 4.0) buffers may cause decomposition.

Background: Carbacyclic phosphatidic acid is an analog of naturally occurring cyclic phosphatidic acid in which the sn-3 oxygen has been replaced with carbon making a stable phosphonate with is resistant to ring opening. ccPA is an analog of LPA but does not activate the LPA₁₋₄ receptors. It also acts as a potent inhibitor of Autotaxin and can inhibit the metastasis of B16-F10 melanoma cells when injected into mice.

References: 1) Baker, D. L., *et al.* "Carba Analogs of Cyclic Phosphatidic Acid Are Selective Inhibitors of Autotaxin and Cancer Cell Invasion and Metastasis" *J. Biol. Chem.* 2006, *281*, 22786.

2) Uchiyama, A. *et al.* "Inhibition of transcellular tumor cell migration and metastasis by novel carba-derivatives of cyclic phosphatidic acid." *Biochim. Biophys. Acta* 2007, *1771*, 103.

3), Williams, J. R. *et al.* "Unique ligand selectivity of the GPR92/LPA5 lysophosphatidate receptor indicates role in human platelet activation" *J. Biol. Chem.* 2009, *284*, 17304.

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.

Technical Data Sheet, Rev 2, 2-6-19 – For research use only. Not intended for diagnostic or therapeutic use.

