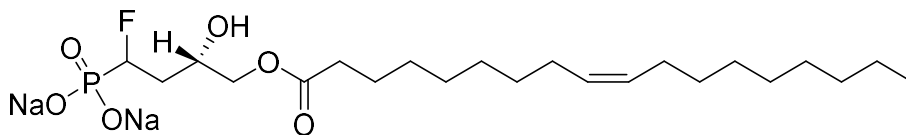


XY-17 (LPA₃ Agonist)

Catalog number: L-9118



Molecular Formula: C₂₂H₄₀FN₂O₆P

MW: 790.50

CAS#: 565438-23-5

Solubility: Methanol, >1 mg/mL. Stock solutions can be further diluted into buffer.

Alternate name: (3S) 1-Fluoro-3-hydroxy-4-(oleoyloxy)butyl-1-phosphonate

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

Background: XY-17 is a fluorinated phosphonate analog of lysophosphatidic acid (LPA). XY-17 is not hydrolyzed by lipid phosphate phosphatase (LPP) and acts as an agonist of the LPA₃ receptor.

References: 1) Xu, Y., M. Tanaka, et al. (2004). "Alkyl lysophosphatidic acid and fluoromethylene phosphonate analogs as metabolically-stabilized agonists for LPA receptors." *Bioorg Med Chem Lett* 14(21): 5323-8.

2) Zhao, Y., P. V. Usatyuk, et al. (2005). "Lipid phosphate phosphatase-1 regulates lysophosphatidic acid-induced calcium release, NF-kappaB activation and interleukin-8 secretion in human bronchial epithelial cells." *Biochem. J.* 385(2): 493-502.

3) Prestwich, G., Y. Xu, et al. (2005). "New metabolically stabilized analogues of lysophosphatidic acid: agonists, antagonists and enzyme inhibitors." *Biochem Soc Trans* 33: 1357-1361.

4) W.N. Ayre, T. Scott, et al. (2016) "Fluorophosphonate-functionalised titanium via a pre-adsorbed alkane phosphonic acid: a novel dual action surface finish for bone regenerative applications." *J Mater Sci Mater Med.* Feb;27(2):36. doi: 10.1007/s10856-015-5644-7

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.

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