PRODUCT INFORMATION



Methyl γ-Linolenyl Fluorophosphonate

Item No. 70664

CAS Registry No.: 1370451-91-4

Formal Name: 6Z,9Z,12Z-octadecatrienyl-

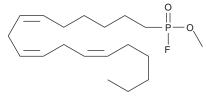
phosphonofluoridic acid, methyl ester

Synonym: MF: $C_{19}H_{34}FO_{2}P$ FW: 344.4 **Purity:** ≥98%

Supplied as: A solution in methyl acetate

Storage: -20°C Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



Laboratory Procedures

Methyl γ-Linolenyl Fluorophosphonate (MγLnFP) is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. A stock solution may be made by dissoving the MyLnFP in the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of MyLnFP in these solvents is approximately 3 mg/ml.

MγLnFP is sparingly soluble in aqueous buffers. Therefore, further dilutions of the organic solvent solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Store aqueous solutions of MyLnFP on ice and use within 12 hours of preparation. Although the aqueous solutions of MyLnFP may be stable for more than 12 hours, we strongly recommend using a fresh preparation each day.

Description

MγLnFP is an analog of methyl arachidonyl fluozophosphonate (MAFP; Item No. 70660), which has been widely studied as an inhibitor of phopholipases, FAAH, and as a CB receptor ligand. 1-3 The pharmacology of the γ-linolenyl analog of MAFP has not been completely investigated.

References

- 1. Huang, Z., Liu, S., Street, I., et al. Methyl arachidonyl fluorophosphonate, a potent irreversible cPLA2 inhibitor, blocks the mobilization of arachidonic acid in human platelets and neutrophils. Mediators Inflamm. 3, 307-308 (1994).
- 2. Deutsch, D.G., Omeir, R., Arreaza, G., et al. Methyl arachidonyl fluorophosphonate: A potent irreversible inhibitor of anandamide amidase. Biochem. Pharmacol. 53, 255-260 (1997).
- Lio, Y.-C., Reynolds, L.J., Balsinde, J., et al. Irreversible inhibition of Ca²⁺-independent phospholipase A₂ by methyl arachidonyl fluorophosphonate. Biochim. Biophys. Acta 1302, 55-60 (1996).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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