

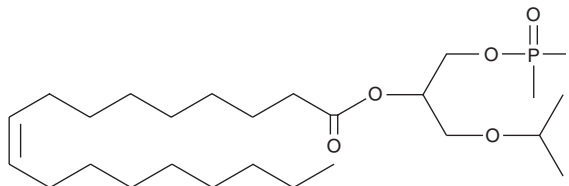
Product Information



O-7460

Item No. 14009

CAS Registry No.: 1572051-31-0
Formal Name: 2-[(fluoromethylphosphinyl)oxy]-1-[(1-methylethoxy)methyl]ethyl ester, 9Z-octadecenoic acid
MF: C₂₅H₄₈FO₅P
FW: 478.6
Purity: ≥95%
Stability: ≥1 year at -20°C
Supplied as: A solution in methyl acetate



Laboratory Procedures

For long term storage, we suggest that O-7460 be stored as supplied at -20°C. It should be stable for at least one year and is supplied as a solution in methyl acetate.

Description

In humans, two forms of diacylglycerol lipase, DAGL α and DAGL β , generate the endocannabinoid 2-arachidonoyl glycerol (2-AG; Item No. 62160) by attacking DAG at the *sn*-1 position. O-7460 is a selective inhibitor of 2-AG biosynthesis *via* DAGL α (IC₅₀ = 690 nM).¹ It demonstrates much weaker inhibition towards human monoacylglycerol lipase and rat brain fatty acid amide hydrolase (IC₅₀s > 10 μ M) and does not bind to CB₁ or CB₂ cannabinoid receptors (K_is > 10 μ M).¹ At 0-12 mg/kg, i.p. in mice, O-7460 was reported to dose-dependently inhibit high-fat diet intake and reduce body weight.¹

Reference

1. Bisogno, T., Mahadevan, A., Coccurello, R., *et al.* A novel fluorophosphonate inhibitor of the biosynthesis of the endocannabinoid 2-arachidonoylglycerol with potential anti-obesity effects. *Br. J. Pharmacol.* **169**(4), 784-793 (2012).

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

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Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will meet our specifications at the time of delivery.

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