

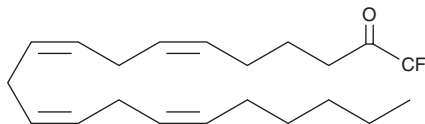
PRODUCT INFORMATION



Arachidonyl Trifluoromethyl Ketone

Item No. 62120

CAS Registry No.: 149301-79-1
Formal Name: 1,1,1-trifluoro-6Z,9Z,12Z,15Z-heneicosatetraen-2-one
Synonyms: AATFMK, ATK
MF: C₂₁H₃₁F₃O
FW: 356.5
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Arachidonyl Trifluoromethyl Ketone (ATK) is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO, dimethyl formamide, or acetonitrile purged with an inert gas or nitrogen can be used. Further dilutions of the stock 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.

Description

ATK is reported to be a potent and selective slow-binding inhibitor of cytosolic human phospholipase A₂ (cPLA₂).¹ In a phospholipid/Triton X-100 mixed micelles solution at 1.6 mol% ATK produced greater than 95% inhibition of the cPLA₂.² ATK was shown to inhibit arachidonic acid release from phospholipase and prostaglandin biosynthesis by the cyclooxygenase pathway independently.³

References

1. Bartoli, F., Lin, H-K., Ghomashchi, F., *et al.* Tight binding inhibitors of 85-kDa phospholipase A₂ but not 14-kDa phospholipase A₂ inhibit release of free arachidonate in thrombin-stimulated human platelets. *J. Biol. Chem.* **269**, 15625-15630 (1994).
2. Street, I.P., Lin, H-K., Laliberté, F., *et al.* Slow- and tight-binding inhibitors of the 85-kDa human phospholipase A₂. *Biochemistry* **32**, 5935-5940 (1993).
3. Riendeau, D., Guay, J., Weech, P.K., *et al.* Arachidonyl trifluoromethyl ketone, a potent inhibitor of 85-kDa phospholipase A₂, blocks production of arachidonate and 12-hydroxyeicosatetraenoic acid by calcium ionophore-challenged platelets. *J. Biol. Chem.* **269**, 15619-15624 (1994).

WARNING

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

SAFETY DATA

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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