PRODUCT INFORMATION



Arachidonoyl Cyclopropylamide

Item No. 91053

CAS Registry No.: 229021-64-1

Formal Name: N-cyclopropyl-5Z,8Z,11Z,14Z-

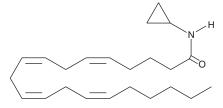
eicosatetraenamide

Synonym: MF: $C_{23}H_{37}NO$ FW: 343.6 **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

Arachidonoyl Cyclopropylamide (ACPA) 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 and dimethyl formamide purged with an inert gas can be used. The solubility of ACPA in these solvents is approximately 10 and 15 mg/ml, respectively.

ACPA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of ACPA should be diluted with the aqueous buffer of choice. ACPA has a solubility of approximately 1 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method.

Description

ACPA is a potent and selective cannabinoid (CB) receptor 1 agonist with K, values of 2.2 and 715 nM for CB_1 and CB_2 receptors, respectively. In whole animal experiments, ACPA induces hypothermia in mice with the same efficacy as arachidonoyl ethanolamide (AEA; Item No. 90050), in spite of its higher affinity for the CB₁ receptor. These data have been interpreted to indicate that ACEA may be a substrate for fatty acid amide hydrolase (FAAH), and thus only transiently available in whole animal experiments.²

References

- 1. Pertwee, R.G. Pharmacology of cannabinoid receptor ligands. Curr. Med. Chem. 6(8), 635-664 (1999).
- 2. Hillard, C.J., Manna, S., Greenberg, M.J., et al. Synthesis and characterization of potent and selective agonists of the neuronal cannabinoid receptor (CB₁). J. Pharmacol. Exp. Ther. 289(3), 1427-1433 (1999).

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.

WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 02/29/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM