

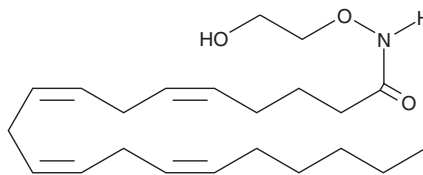
PRODUCT INFORMATION



oxy-Arachidonoyl Ethanolamide

Item No. 10008642

CAS Registry No.: 883296-70-6
Formal Name: N-(2-hydroxyethoxy)-5Z,8Z,11Z,14Z-eicosatetraenamide
Synonyms: oxy-AEA, oxy-Anandamide
MF: C₂₂H₃₇NO₃
FW: 363.5
Purity: ≥98%
Supplied as: A 50 mg/ml solution in ethanol
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

oxy-AEA 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 (DMF) purged with an inert gas can be used. The solubility of oxy-AEA in these solvents is approximately 30 mg/ml in DMSO and approximately 20 mg/ml in DMF.

If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

AEA acts as an endogenous mimic of D⁹-THC, the psychotropic component of marijuana.¹ oxy-AEA is the O-alkyl-N-acyl oxyhomologue of AEA. oxy-AEA binds selectively to the peripheral cannabinoid (CB₂) receptor with K_i values of 0.47 and 0.081 μM for hCB₁ and hCB₂, respectively.² In comparison, anandamide has a greater affinity for the central cannabinoid (CB₁) receptor with K_i values of 0.07 and 0.18 μM for hCB₁ and hCB₂, respectively. oxy-AEA is the first known fatty acid amide with a reversed CB₁/CB₂ affinity ratio.

References

1. Devane, W.A., Hanus, L., Breuer, A., *et al.* Isolation and structure of a brain constituent that binds to the cannabinoid receptor. *Science* **258**, 1946-1949 (1992).
2. Appendino, G., Minassi, A., Berton, L., *et al.* Oxyhomologues of anandamide and related endolipids: Chemoselective synthesis and biological activity. *J. Med. Chem.* **49**, 2333-2338 (2006).

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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