

PRODUCT INFORMATION



Arachidonoyl Ethanolamide MaxSpec® Standard

Item No. 10007270

CAS Registry No.: 94421-68-8

Formal Name: N-(2-hydroxyethyl)-5Z,8Z,11Z,14Z-eicosatetraenamide

Synonyms: AEA, Anandamide

MF: C₂₂H₃₇NO₂

FW: 347.5

Purity: ≥95%

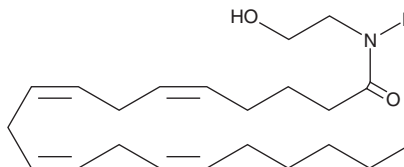
Supplied as: A solution in ethanol; in a deactivated glass ampule

Concentration: 100 µg/ml (nominal); see certificate of analysis for verified concentration

Storage: -20°C

Stability: ≥5 years; *Stability testing is ongoing to ensure concentration accuracy. The certificate of analysis and product expiry date will be updated upon completion of testing.*

Special Conditions: Store upright and unopened at -20°C. Warm to room temperature prior to opening. Light sensitive.



Description

Arachidonoyl ethanolamide (AEA) is the ethanolamine amide of arachidonic acid (Item No. 90010), first isolated from porcine brain.¹ AEA is an endogenous cannabinoid neurotransmitter that binds to both central cannabinoid (CB₁) and peripheral cannabinoid (CB₂) receptors.² AEA inhibits the specific binding of [³H]-HU-243 to synaptosomal membranes with a K_i value of 52 nM, compared to 46 nM for Δ⁹-THC (Item Nos. 12068 | ISO60157).¹

AEA MaxSpec® standard is a quantitative grade standard of AEA (Item No. 90050) that has been prepared specifically for mass spectrometry or any application where quantitative reproducibility is required. The solution has been prepared gravimetrically and is supplied in a deactivated glass ampule sealed under argon. The concentration was verified by comparison to an independently prepared calibration standard. This AEA MaxSpec® standard is guaranteed to meet identity, purity, stability, and concentration specifications and is provided with a batch-specific certificate of analysis. Ongoing stability testing is performed to ensure the concentration remains accurate throughout the shelf life of the product. **Note:** *The amount of solution added to the vial is in excess of the listed amount. Therefore, it is necessary to accurately measure volumes for preparation of calibration standards. Follow recommended storage and handling conditions to maintain product quality.*

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(5090)**, 1946-1949 (1992).
2. Felder, C.C., Briley, E.M., Axelrod, J., *et al.* Anandamide, an endogenous cannabimimetic eicosanoid, binds to the cloned human cannabinoid receptor and stimulates receptor-mediated signal transduction. *Proc. Natl. Acad. Sci. U.S.A.* **90(16)**, 7656-7660 (1993).

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.

WARRANTY AND LIMITATION OF REMEDY

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