

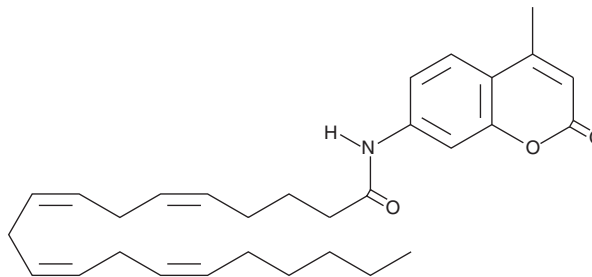
PRODUCT INFORMATION



AMC Arachidonoyl Amide

Item No. 10005098

CAS Registry No.: 862913-13-1
Formal Name: 7-amino-4-methyl-2H-1-benzopyran-2-one-5Z,8Z,11Z,14Z-eicosatetraenamide
Synonyms: AMC-AA, 7-Amino-4-Methyl Coumarin-Arachidonamide
MF: C₃₀H₃₉NO₃
FW: 461.6
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -80°C
Stability: ≥2 years
UV/Vis.: λ_{max}: 229, 328 nm



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

Laboratory Procedures

For long term storage, we suggest that AMC arachidonoyl amide (AMC-AA) be stored as supplied at -20°C. It should be stable for at least two years.

AMC-AA is supplied as a crystalline solid. A stock solution may be made by dissolving the AMC-AA in an organic solvent purged with an inert gas. AMC-AA is soluble in organic solvents such as DMSO, and dimethyl formamide. The solubility of AMC-AA in these solvents is approximately 20 mg/ml.

AMC-AA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AMC-AA should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AMC-AA has a solubility of approximately 0.05 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

AMC-AA is one of several fatty acid amides which can be used to measure fatty acid amide hydrolase (FAAH) activity.¹ FAAH is a relatively unselective enzyme in that it accepts a variety of amide head groups other than the ethanolamine of its nominal endogenous substrate anandamide (AEA; Item No. 90050).² Exposure of AMC-AA to FAAH activity results in the release of the fluorescent aminomethyl coumarin that absorbs at 360 nm and emits at 465 nm. This allows the fast and convenient measurement of FAAH activity using a simple cuvette or microplate fluorometer.

References

1. Cravatt, B.F., Giang, D.K., Mayfield, S.P., *et al.* Molecular characterization of an enzyme that degrades neuromodulatory fatty-acid amides. *Nature* **384**, 83-87 (1996).
2. Patricelli, M.P. and Cravatt, B.F. Characterization and manipulation of the acyl chain selectivity of fatty acid amide hydrolase. *Biochemistry* **40**, 6107-6115 (2001).

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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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