PRODUCT INFORMATION

UCM707
Item No. 10045

CAS Registry No.: 390824-20-1
Formal Name: N-(3-furylmethyl)-5Z,8Z,11Z,14Z-eicosatetraenamide
MF: C25H37NO2
FW: 383.6
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in methyl acetate

Laboratory Procedures

For long term storage, we suggest that UCM707 be stored as supplied at -20°C. It should be stable for at least one year.

UCM707 is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of UCM707 in these solvents is approximately 20 mg/ml.

UCM707 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the methyl acetate solution of UCM707 should be diluted with the aqueous buffer of choice. UCM707 has a solubility of 250 μg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Numerous analogs of arachidonoyl ethanolamide (AEA, anandamide) potentiate its biological activity. This potentiation is ascribed either to inhibition of AEA reuptake into neurons, or inhibition of fatty acid amide hydrolase (FAAH) within the neurons. One of the more potent and selective reuptake inhibitors is UCM707, a 3-furyl arachidonoyl analog. UCM707 has an IC50 value of 0.8 μM for the inhibition of tritiated AEA uptake into human U937 cells but has a low affinity for FAAH, exhibiting an IC50 value of 30 μM. UCM707 also potentiates the biological effects of AEA when co-administered in rats.

References