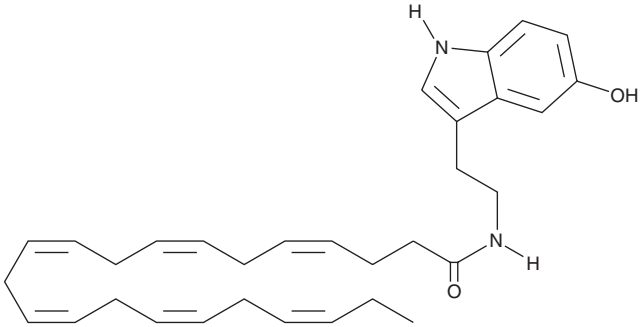
PRODUCT INFORMATION

Docosahexaenoyl Serotonin

Item No. 9000639



CAS Registry No.: 212707-51-2
Formal Name: N-[2-(5-hydroxy-1H-indol-3-yl) ethyl]-4Z,7Z,10Z,13Z,16Z,19Z-docosahexaenamide
MF: $C_{32}H_{42}N_2O_2$
FW: 486.7
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

Docosahexaenoyl serotonin 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 docosahexaenoyl serotonin in these solvents is approximately 15 mg/ml.

Docosahexaenoyl serotonin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of docosahexaenoyl serotonin should be diluted with the aqueous buffer of choice. The solubility of docosahexaenoyl serotonin in PBS (pH 7.2) is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Docosahexaenoyl serotonin is a hybrid molecule patterned after arachidonoyl serotonin (Item No. 70665). Arachidonoyl serotonin is a dual antagonist of fatty acid amide hydrolase (FAAH) and the transient receptor potential vanilloid 1 (TRPV1) channel, reducing both acute and chronic peripheral pain.[1,2] The effects of replacing the arachidonoyl portion with docosahexaenoyl have not been studied.

References

1. Ortar, G., Cascio, M.G., De Petrocellis, L., *et al.* New N-arachidonoylserotonin analogues with potential "dual" mechanism of action against pain. *J. Med. Chem.* **50**, 6554-6569 (2007).
2. Maione, S., De Petrocellis, L., de Novellis, V., *et al.* Analgesic actions of N-arachidonoyl-serotonin, a fatty acid amide hydrolase inhibitor with antagonistic activity at vanilloid TRPV1 receptors. *Br. J. Pharmacol.* **150**, 766-781 (2007).

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