

Produktinformation



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Diagnostik & molekulare Diagnostik
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Product Information



Eicosapentaenoyl 1-propanol-2-amide

Item No. 17547

CAS Registry No.: Formal Name:	1638355-66-4 N-(2-hydroxy-1-methylethyl)- 5Z,8Z,11Z,14Z,17Z-eicosapentaenamide	но
MF: FW: Purity: Stability: Supplied as:	$C_{23}H_{37}NO_2$ 359.6 ≥98% ≥1 year at -20°C A solution in ethanol	

Laboratory Procedures

For long term storage, we suggest that eicosapentaenoyl 1-propanol-2-amide be stored as supplied at -20°C. It should be stable for at least one year.

Eicosapentaenoyl 1-propanol-2-amide 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 ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of eicosapentaenoyl 1-propanol-2-amide in these solvents is approximately 30 mg/ml.

Eicosapentaenoyl 1-propanol-2-amide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of eicosapentaenoyl 1-propanol-2-amide should be diluted with the aqueous buffer of choice. Eicosapentaenoyl 1-propanol-2-amide has a solubility of approximately 0.3 mg/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

Monoacylglycerols (MAGs) of ω -3 polyunsaturated fatty acids have diverse physiological and health effects.¹⁻³ In particular, MAGs containing docosahexaenoic acid (Item No. 90310) or eicosapentaenoic acid (EPA; Item No. 90110) have anti-proliferative properties against colon and lung cancer cell lines.⁴ Eicosapentaenoyl 1-propanol-2-amide is an EPA-containing MAG amide analog that inhibits the growth of human lung carcinoma A549 cells, producing 98.4% growth inhibition when applied at 3 μ M.⁵ It is an analog of eicosapentaenoyl ethanolamide (Item No. 10964), a natural N-acylethanolamide that impacts aging and inflammation.^{6,7}

References

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- 2. Douglass, J.D., Zhou, Y.X., Wu, A., et al. Global deletion of MGL in mice delays lipid absorption and alters energy homeostasis and diet-induced obesity. J. Lipid Res. 56(6), 1153-1171 (2015).
- 3. Morin, C., Blier, P.U., and Fortin, S. Eicosapentaenoic acid and docosapentaenoic acid monoglycerides are more potent than docosahexaenoic acid monoglyceride to resolve inflammation in a rheumatoid arthritis model. Arthritis Res. Ther. 17, (2015).
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WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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