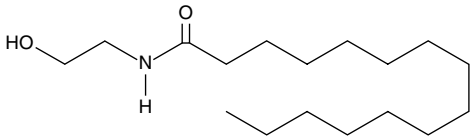
Product Information

Pentadecanoyl Ethanolamide

Item No. 9001740

CAS Registry No.: 53832-58-9
Formal Name: N-(2-hydroxyethyl)-pentadecanamide
MF: $C_{17}H_{35}NO_2$
FW: 285.5
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that pentadecanoyl ethanolamide be stored as supplied at -20°C. It should be stable for at least two years.

Pentadecanoyl ethanolamide is supplied as a crystalline solid. A stock solution may be made by dissolving the pentadecanoyl ethanolamide in the solvent of choice. Pentadecanoyl ethanolamide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of pentadecanoyl ethanolamide in these solvents is approximately 12.5, 3.3, and 5 mg/ml, respectively.

Pentadecanoyl ethanolamide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, pentadecanoyl ethanolamide should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Pentadecanoyl ethanolamide has a solubility of approximately 0.33 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.

Pentadecanoyl ethanolamide is a member of the family of fatty N-acyl ethanolamines collectively called endocannabinoids.[1-5] The specific role and relative importance of this ethanolamine metabolite have not been determined.

References

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3. Saghatelian, A., Trauger, S.A., Want, E.J., *et al.* Assignment of endogenous substrates to enzymes by global metabolite profiling. *Biochemistry* **43**, 14332-14339 (2004).
4. Buczynski, M.W., Svensson, C.I., Dumlao, D.S., *et al.* Inflammatory hyperalgesia induces essential bioactive lipid production in the spinal cord. *J. Neurochem.* **114**, 981-993 (2010).
5. Mulder, A.M. and Cravatt, B.F. Endocannabinoid metabolism in the absence of fatty acid amide hydrolase (FAAH): Discovery of phosphorylcholine derivatives of N-acyl ethanolamines. *Biochemistry* **45**, 11267-11277 (2006).

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