

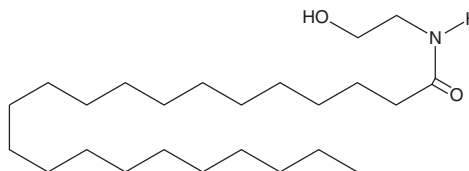
# PRODUCT INFORMATION



## Docosanoyl Ethanolamide

Item No. 10005823

CAS Registry No.: 94109-05-4  
Formal Name: N-(2-hydroxyethyl)-docosanamide  
MF:  $C_{24}H_{49}NO_2$   
FW: 383.7  
Purity:  $\geq 98\%$   
Supplied as: A crystalline solid  
Storage:  $-20^{\circ}C$   
Stability:  $\geq 2$  years



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

### Laboratory Procedures

Docosanoyl ethanolamide is supplied as a crystalline solid. A stock solution may be made by dissolving the docosanoyl ethanolamide in an organic solvent purged with an inert gas. Docosanoyl ethanolamide is soluble in the organic solvent chloroform. The solubility of docosanoyl ethanolamide in chloroform is approximately 0.3 mg/ml.

If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

The endocannabinoids present a rich system of central cannabinoid ( $CB_1$ ), peripheral cannabinoid ( $CB_2$ ), and non-CB receptor-mediated pharmacology that has stimulated research in many fields including memory, weight loss and appetite, neurodegeneration, tumor surveillance, analgesia, and inflammation.<sup>1,2</sup> Docosanoyl ethanolamide is a saturated N-acylethanolamide. Non-CB receptor-mediated pharmacology of the saturated ethanolamides is still being elucidated.<sup>3</sup> Other studies indicate they may have a role in the functioning of ion channels.<sup>4</sup>

### References

1. Pertwee, R.G. Pharmacology of cannabinoid receptor ligands. *Current Medicinal Chemistry* **6**, 635-664 (1999).
2. Martin, B.R., Mechoulam, R., and Razdan, R.K. Discovery and characterization of endogenous cannabinoids. *Life Sci.* **65**, 573-595 (1999).
3. Smart, D., Jonsson, K.-O., Vandevoorde, S., et al. 'Entourage' effects of N-acyl ethanolamines at human vanilloid receptors. Comparison of effects upon anandamide-induced vanilloid receptor activation and upon anandamide metabolism. *Br. J. Pharmacol.* **136**, 452-458 (2002).
4. Oz, M., Alptekin, A., Tchugunova, Y., et al. Effects of saturated long-chain N-acylethanolamines on voltage-dependent  $Ca^{2+}$  fluxes in rabbit T-tubule membranes. *Arch. Biochem. Biophys.* **434**, 344-351 (2005).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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