SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

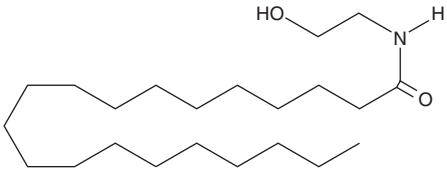
linkedin.com/company/szaboscandic

Product Information

Arachidoyl Ethanolamide

Catalog No. 10005765

CAS Registry No.: 94421-69-9
Formal Name: N-(2-hydoxyethyl)-eicosanamide
Synonym: N-Arachidoylethanolamine
MF: $C_{22}H_{45}NO_2$
FW: 355.6
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

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

Arachidoyl ethanolamide is supplied as a crystalline solid. A stock solution may be made by dissolving the arachidoyl ethanolamide in an organic solvent purged with an inert gas. Arachidoyl ethanolamide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of arachidoyl ethanolamide in these solvents is approximately 30, 20, and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of arachidoyl ethanolamide can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of arachidoyl ethanolamide in PBS (pH 7.2) is approximately 0.15 mg/ml. We do not recommend storing the aqueous solution for more than one day.

The endocannabinoids[1,2] 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. Arachidoyl ethanolamide is one of the saturated fatty acyl ethanolamides devoid of classical (CB_1/CB_2) activity. Arachidoyl ethanolamide does not bind to the murine CB_1 receptor[3] and does not compete with anandamide as a substrate for the endocannabinoid hydrolytic enzyme fatty acid amide hydrolase.[4] Non-CB receptor-mediated pharmacology of the saturated ethanolamides is still being elucidated.[5]

References

1. Martin, B.R., Mechoulam, R., and Razdan, R.K. Discovery and characterization of endogenous cannabinoids. *Life Sci.* **65**, 573-595 (1999).
2. Pertwee, R.G. Pharmacology of cannabinoid receptor ligands. *Current Medicinal Chemistry* **6**, 635-664 (1999).
3. Sheskin, T., Hanus, L., Slager, J., *et al.* Structural requirements for binding of anandamide-type compounds to the brain cannabinoid receptor. *J. Med. Chem.* **40**, 659-667 (1997).
4. Desarnaud, F., Cadas, H., and Piomelli, D. Anandamide amidohydrolase activity in rat brain microsomes. Identification and partial characterization. *J. Biol. Chem.* **270(11)**, 6030-6035 (1995).
5. 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).

Related Products

Arachidonoyl *p*-Nitroaniline - Cat. No. 10168 • Arachidonoyl Ethanolamide Phosphate - Cat. No. 10180 • Arachidonoyl Ethanolamide - Cat. No. 90050

Cayman Chemical

Mailing address
1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone
(800) 364-9897
(734) 971-3335

Fax
(734) 971-3640

E-Mail
custserv@caymanchem.com

Web
www.caymanchem.com