

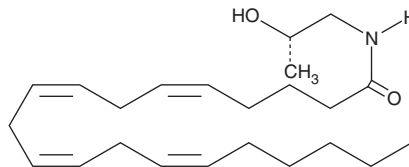
Product Information



S-2 Methanandamide

Catalog No. 90076

Formal Name:	N-(2S-hydroxypropyl)-5Z,8Z,11Z,14Z-eicosatetraenamide
Synonym:	(S)-(+)-Arachidonyl-2'-Hydroxy-1'-Propylamide
MF:	C ₃₂ H ₃₉ NO ₂
FW:	361.6
Purity:	≥98%
Stability:	≥1 year at -20°C
Supplied as:	A solution in ethanol



Laboratory Procedures

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

S-2 methanandamide 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 S-2 methanandamide in these solvents is approximately 10 mg/ml.

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. If an organic solvent-free solution of S-2 methanandamide is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of S-2 methanandamide in PBS, pH 7.2, is approximately 100 µg/ml. We do not recommend storing the aqueous solution for more than one day. For maximum solubility in aqueous buffers, the ethanolic solution of S-2 methanandamide should be diluted with the aqueous buffer of choice. S-2 methanandamide has a solubility of approximately 8.5 mg/ml in a 1:2 solution of ethanol: PBS (pH 7.2) using this method.

S-2 methanandamide is the second most potent CB₁ receptor agonist in the methanandamide series. It has a K_i value of 26 nM for the CB₁ receptor.¹ S-2 methanandamide is also less prone to FAAH inactivation, and inhibits the murine vas deferens twitch response with an IC₅₀ value of 47 nM.¹

Reference

1. Abadji, V., Lin, S., Taha, G., *et al.* (R)-Methanandamide: A chiral novel anandamide possessing higher potency and metabolic stability. *J. Med. Chem.* **37**, 1889-1893 (1994).

Related Products

Arachidonyl Ethandamide - Item No. 90050 • R-1 Methanandamide - Item No. 90070 • S-1 Methanandamide - Item No. 90072 • R-2 Methanandamide - Item No. 90074

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

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL 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 Material Safety Data Sheet, which has been sent via email to your institution.

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