

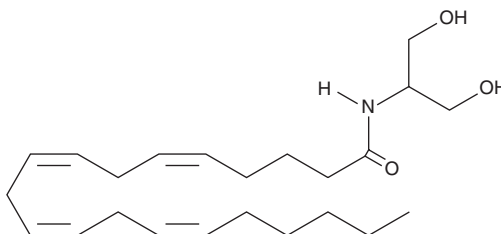
# PRODUCT INFORMATION



## Arachidonoyl Serinol

Item No. 62170

**CAS Registry No.:** 183718-70-9  
**Formal Name:** N-[(2-hydroxy-1-hydroxymethyl)ethyl]-5Z,8Z,11Z,14Z-eicosatetraenamide  
**MF:** C<sub>23</sub>H<sub>39</sub>NO<sub>3</sub>  
**FW:** 377.6  
**Purity:** ≥98%  
**Supplied as:** A solution in ethanol  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

Arachidonoyl serinol 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 arachidonoyl serinol in these solvents is approximately 10 and 20 mg/ml, respectively.

### Description

2-Arachidonoyl glycerol (2-AG) has been isolated from porcine brain, and has been characterized as the natural endocannabinoid ligand for the CB<sub>1</sub> receptor.<sup>1,2</sup> Replacement of the *sn*-2 oxygen in the glycerol moiety of 2-AG with a nitrogen atom gives arachidonoyl serinol.<sup>3</sup> Arachidonoyl serinol is much more stable than 2-AG. However, it is at least a log less potent as a CB<sub>1</sub> receptor agonist than 2-AG.<sup>2</sup>

### References

1. Sugiura, T., Kodaka, T., Kondo, S., *et al.* 2-Arachidonoylglycerol, a putative endogenous cannabinoid receptor ligand, induces rapid, transient elevation of intracellular free Ca<sup>2+</sup> in neuroblastoma X glioma hybrid NG108-15 cells. *Biochem. Biophys. Res. Commun.* **229**(1), 58-64 (1996).
2. Sugiura, T., Kodaka, T., Kondo, S., *et al.* Is the cannabinoid CB<sub>1</sub> receptor a 2-arachidonoylglycerol receptor? Structural requirements for triggering a Ca<sup>2+</sup> transient in NG108-15 cells. *J. Biochem.* **122**(4), 890-895 (1997).
3. Khanolkar, A.D., Abadji, V., Lin, S., *et al.* Head group analogs of arachidonylethanolamide, the endogenous cannabinoid ligand. *J. Med. Chem.* **39**(22), 4515-4519 (1996).

#### 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.

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
[WWW.CAYMANCHEM.COM](http://WWW.CAYMANCHEM.COM)