

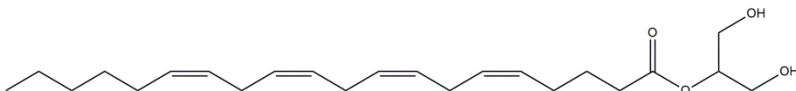
2-Arachidonoylglycerol

02/20

ALTERNATE NAMES: 1,3-dihydroxypropan-2-yl (5Z,8Z,11Z,14Z)-icosa-5,8,11,14-tetraenoate; Glycerol 2-arachidonate; (5Z,8Z,11Z,14Z)-1,3-dihydroxypropan-2-yl icosa-5,8,11,14-tetraenoate

CATALOG #: B2992-1 1 mg
B2992-5 5 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₃H₃₈O₄

MOLECULAR WEIGHT: 378.55

CAS NUMBER: 53847-30-6

APPEARANCE: Colorless Solution

FORMULATION: A solution in acetonitrile (as a 9:1 mixture of the 2-AG and 1-AG)

PURITY: ≥95%

SOLUBILITY: ~10 mg/ml in DMSO
~150 µg/ml in PBS, pH 7.2

DESCRIPTION: 2-arachidonoylglycerol is an endocannabinoid and an endogenous agonist of the cannabinoid G-protein coupled receptors (CB1 and CB2) with K_i values of 472 nM and 1400 nM respectively. 2-arachidonoylglycerol induces a rapid, transient increase in intracellular free calcium in NG108-15 cells at a concentration of 0.3 nM, through a CB1 receptor-dependent mechanism. It is present at relatively high levels in the brain when compared to anandamide.

STORAGE TEMPERATURE: -80°C

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Sugiura, T., Kodaka, T., Nakane, S., et al. Evidence that the cannabinoid CB1 receptor is a 2-arachidonoylglycerol receptor. Structure-activity relationship of 2-arachidonoylglycerol, ether-linked analogues, and related compounds. *J. Biol. Chem.* 274(5), 2794-2801 (1999).
2. Mechoulam, R., Ben-Shabat, S., Hanus, L., et al. Identification of an endogenous 2-monoglyceride, present in canine gut, that binds to cannabinoid receptors. *Biochem Pharmacol.* 1995 Jun 29;50(1):83-90.

RELATED PRODUCTS:

BAY 59-3074 (Cat. No. B1247)
 EZSolution™ MAFP (Cat. No. 2811)
 JZL195 (Cat. No. B1064)
 Leelamine hydrochloride (Cat. No. 2717)
 SR-144528 (Cat. No. B2615)

DISCLAIMER: *FOR RESEARCH USE ONLY! Not to be used on humans.*