

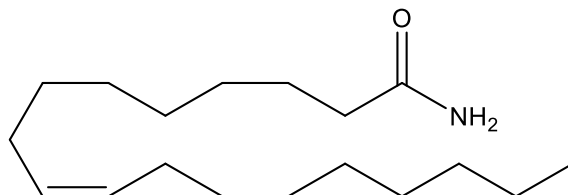
**Catalog # 10-2923**

**Oleamide**

CAS# 301-02-0

9Z-Octadecenamide; *cis*-9-Octadecenamide; Oleic acid amide

Lot # S105236



Originally identified in the cerebrospinal fluid of sleep-deprived cats acting as an inducer of physiological sleep in animals.<sup>1</sup> Displays agonist activity at cannabinoid CB1 receptors ( $K_i=8.13 \mu\text{M}$ ).<sup>2</sup> Activates PPAR $\gamma$ .<sup>3</sup> Produces vasodilator effects in rats.<sup>4</sup> Displays neuroprotective effects<sup>5</sup> and attenuates sepsis-induced intestinal injury<sup>6</sup>.

- 1) Boger *et al.* (1998), *Oleamide: an endogenous sleep-inducing lipid and prototypical member of a new class of biological signaling molecules*; *Curr. Pharm. Des.*, **4** 303
- 2) Leggett *et al.* (2004), *Oleamide is a selective endogenous agonist of rat and human CB1 cannabinoid receptors*; *Br. J. Pharmacol.*, **141** 253
- 3) Dionisi *et al.* (2012), *Oleamide activates peroxisome proliferator-activated receptor gamma (PPAR $\gamma$ ) in vitro*; *Lipids Health Dis.*, **11** 51
- 4) Hernandez-Diaz *et al.* (2020), *Effects of Oleamide on the Vasomotor Responses in the Rat*; *Cannabis Cannabinoid Res.* **5** 42
- 5) Maya-Lopez *et al.* (2020), *A Cannabinoid Receptor-Mediated Mechanism Participates in the Neuroprotective Effects of Oleamide Against Excitotoxic Damage in Rat Brain Synaptosomes and Cortical Slices*; *Neurotox. Res.*, **37** 126
- 6) Zou *et al.* (2019), *Cx43 Inhibition Attenuates Sepsis-Induced Intestinal Injury via Downregulating ROS Transfer and the Activation of the JNK1/Sirt1/FoxO3a Signaling Pathway*; *Mediators Inflamm.*, **2019** 7854389

**PHYSICAL DATA**

Molecular Weight:	281.48
Molecular Formula:	C <sub>18</sub> H <sub>35</sub> NO
Purity:	99% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml) or Ethanol (40 mg/ml)
Physical Description:	White or off-white solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**