

Catalog # 10-1475 Oleoylethanolamide

CAS# 111-58-0 N-(2-Hydroxyethyl)-9Z-octadecenamide; OEA Lot # S104154



Endogenous anandamide-like lipid acting as a PPAR α agonist but does not bind to cannabinoid receptors.¹ Biosynthesis via the action of NAPE-PLD on N-acylphosphatidylethanolamine.² Agonist at GPR119³ and has been suggested to be its endogenous ligand⁴. Inhibits food intake in rodents.⁵ Extends the lifespan of *C. elegans.*⁶

- 1) Lo Verme et al. (2005), Regulation of food intake by oleoylethanolamide; Cell Mol.Life Sci. 62 708
- 2) Magotti et al. (2015), Structure of human N-acylphosphatidylethanolamine-hydrolyzing phospholipase D: regulation of fatty acid ethanolamide biosynthesis by bile acids; Structure **23** 598
- 3) Overton et al. (2006), Deorphanization of a G protein-coupled receptor for oleoylethanolamide and its use in the discovery of small-molecules hypophagic agents; Cell Metab. **3** 167
- 4) Brown (2007), Novel cannabinoid receptors; Br.J.Pharmacol. 152 567
- 5) Nielson et al. (2004), Food intake is inhibited by oral oleoylethanolamide; J.Lipid Res. 45 1027
- Folick et al. (2015), Aging. Lysosomal signaling molecules regulate longevity in Caenorhabditis elegans; Science 347 83

PHYSICAL DATA

Molecular Weight:	325.53
Molecular Formula:	C ₂₀ H ₃₉ NO ₂
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 25 mg/ml) or Ethanol (up to 35 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied 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.

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