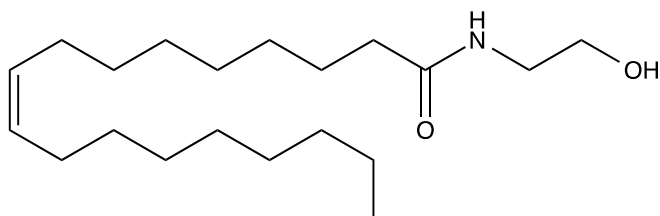


Catalog # 10-1475
Oleoylethanolamide

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
- 6) 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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