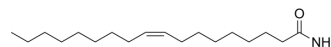


Oleamide

Cat. No.:	HY-N2327		
CAS No.:	301-02-0		
Molecular Formula:	C ₁₈ H ₃₅ NO		
Molecular Weight:	281.48		
Target:	Endogenous Metabolite		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

Ethanol : ≥ 100 mg/mL (355.27 mM)
 DMSO : 100 mg/mL (355.27 mM; ultrasonic and warming and heat to 60°C)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.5527 mL	17.7633 mL	35.5265 mL
	5 mM	0.7105 mL	3.5527 mL	7.1053 mL
	10 mM	0.3553 mL	1.7763 mL	3.5527 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: 2.5 mg/mL (8.88 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (8.88 mM); Clear solution
- Add each solvent one by one: 10% EtOH >> 90% corn oil
 Solubility: 2.5 mg/mL (8.88 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

Oleamide is an endogenous fatty acid amide which can be synthesized de novo in the mammalian nervous system, and has been detected in human plasma.

IC₅₀ & Target

Human Endogenous Metabolite

In Vitro

Oleamide accumulates in the cerebrospinal fluid (CSF) of rats after six hours of sleep deprivation and induces sleep in naive rats and mice. Inhibition of the primary catabolic enzyme of oleamide (fatty acid amide hydrolase) by trifluoromethyl-octadecenone reduces sleep latency and increases total sleep time when given centrally to rats and peripherally to mice^[1] MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Mendelson WB, et al. The hypnotic actions of the fatty acid amide, oleamide. *Neuropsychopharmacology*. 2001 Nov;25(5 Suppl):S36-9.

Caution: Product has not been fully validated for medical applications. For research use only.

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