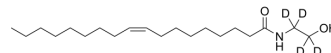


## Oleoylethanolamide-d<sub>4</sub>

Cat. No.:	HY-107542S
CAS No.:	946524-36-3
Molecular Formula:	C <sub>20</sub> H <sub>35</sub> D <sub>4</sub> NO <sub>2</sub>
Molecular Weight:	329.55
Target:	Endogenous Metabolite; PPAR; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Cell Cycle/DNA Damage; Vitamin D Related/Nuclear Receptor; Others
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 20.83 mg/mL (63.21 mM; Need ultrasonic and warming)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		3.0344 mL	15.1722 mL	30.3444 mL
	5 mM		0.6069 mL	3.0344 mL	6.0689 mL
	10 mM		0.3034 mL	1.5172 mL	3.0344 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Oleoylethanolamide-d<sub>4</sub> is the deuterium labeled Oleoylethanolamide. Oleoylethanolamide is a high affinity endogenous PPAR-α agonist, which plays an important role in the treatment of obesity and arteriosclerosis.

#### In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.
- [2]. Chen L, et al. Oleoylethanolamide, an endogenous PPAR-α ligand, attenuates liver fibrosis targeting hepatic stellate cells. Oncotarget. 2015 Dec 15;6(40):42530-40

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA