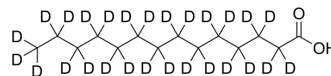


## Myristic acid-d<sub>27</sub>

<b>Cat. No.:</b>	HY-N2041S		
<b>CAS No.:</b>	60658-41-5		
<b>Molecular Formula:</b>	C <sub>14</sub> HD <sub>27</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	255.54		
<b>Target:</b>	Endogenous Metabolite		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 250 mg/mL (978.32 mM; Need ultrasonic and warming)  
 Ethanol : ≥ 15 mg/mL (58.70 mM)  
 DMF : ≥ 15 mg/mL (58.70 mM)  
 DMF : ≥ 15 mg/mL (58.70 mM)  
 Ethanol : ≥ 15 mg/mL (58.70 mM)  
 DMSO : ≥ 12 mg/mL (46.96 mM)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
	1 mM		3.9133 mL	19.5664 mL	39.1328 mL
	5 mM		0.7827 mL	3.9133 mL	7.8266 mL
	10 mM		0.3913 mL	1.9566 mL	3.9133 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Myristic acid-d<sub>27</sub> is the deuterium labeled Myristic acid. Myristic acid is a saturated 14-carbon fatty acid occurring in most animal and vegetable fats, particularly butterfat and coconut, palm, and nutmeg oils.

#### 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.

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## CUSTOMER VALIDATION

- Biomed Chromatogr. 2023 Sep 21;e5732.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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## REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

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

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