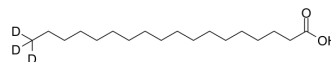


## Stearic acid-d3

<b>Cat. No.:</b>	HY-B2219S3
<b>CAS No.:</b>	62163-39-7
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>33</sub> D <sub>3</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	287.5
<b>Target:</b>	Endogenous Metabolite
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 12.5 mg/mL (43.48 mM); ultrasonic and warming and heat to 60°C																							
	<table border="1"> <thead> <tr> <th rowspan="2">Solvent</th> <th colspan="3">Mass</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <th>Concentration</th> <td></td> <td></td> <td></td> </tr> <tr> <th>1 mM</th> <td>3.4783 mL</td> <td>17.3913 mL</td> <td>34.7826 mL</td> </tr> <tr> <th>5 mM</th> <td>0.6957 mL</td> <td>3.4783 mL</td> <td>6.9565 mL</td> </tr> <tr> <th>10 mM</th> <td>0.3478 mL</td> <td>1.7391 mL</td> <td>3.4783 mL</td> </tr> </tbody> </table>	Solvent	Mass			1 mg	5 mg	10 mg	Concentration				1 mM	3.4783 mL	17.3913 mL	34.7826 mL	5 mM	0.6957 mL	3.4783 mL	6.9565 mL	10 mM	0.3478 mL	1.7391 mL	3.4783 mL
Solvent	Mass																							
	1 mg	5 mg	10 mg																					
Concentration																								
1 mM	3.4783 mL	17.3913 mL	34.7826 mL																					
5 mM	0.6957 mL	3.4783 mL	6.9565 mL																					
10 mM	0.3478 mL	1.7391 mL	3.4783 mL																					
	Please refer to the solubility information to select the appropriate solvent.																							
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1.25 mg/mL (4.35 mM); Clear solution																							

### BIOLOGICAL ACTIVITY

<b>Description</b>	Stearic acid-d <sub>3</sub> is the deuterium labeled Stearic acid. Stearic acid is a long chain dietary saturated fatty acid which exists in many animal and vegetable fats and oils.
<b>In Vitro</b>	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]. Shen MC et al. Dietary stearic acid leads to a reduction of visceral adipose tissue in athymic nude mice. PLoS One. 2014 Sep 15;9(9):e104083.

**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