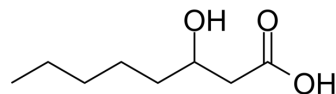


## 3-Hydroxyoctanoic acid

Cat. No.:	HY-113058		
CAS No.:	14292-27-4		
Molecular Formula:	C <sub>8</sub> H <sub>16</sub> O <sub>3</sub>		
Molecular Weight:	160.21		
Target:	Biochemical Assay Reagents		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 42.5 mg/mL (265.28 mM); ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	6.2418 mL	31.2090 mL	62.4181 mL
	5 mM	1.2484 mL	6.2418 mL	12.4836 mL
	10 mM	0.6242 mL	3.1209 mL	6.2418 mL

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 4.25 mg/mL (26.53 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

3-Hydroxyoctanoic acid is a hydroxylated fatty acid that has been found in the LPS of *Pseudomonas aeruginosa* and in methyl-branched poly(3-hydroxyalkanoate) (PHA) polymers produced by *Pseudomonas oleophores*. It is an agonist of the orphan receptor GPR109B, increasing intracellular calcium in human neutrophils endogenously expressing GPR109B. 3-Hydroxycaprylic acid prevents lipolysis in human adipocytes and is upregulated in human plasma in response to a ketogenic diet. Plasma levels of 3-hydroxyoctanoic acid were also increased 3.41-fold in human male runners exhausted on a treadmill and in a mouse model of autism spectrum disorder (ASD) fed a high-glycemic diet.

**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

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