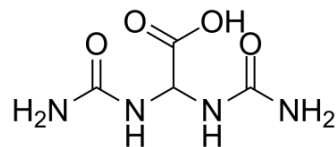


## Allantoic acid

<b>Cat. No.:</b>	HY-B1514		
<b>CAS No.:</b>	99-16-1		
<b>Molecular Formula:</b>	C <sub>4</sub> H <sub>8</sub> N <sub>4</sub> O <sub>4</sub>		
<b>Molecular Weight:</b>	176.13		
<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

<b>In Vitro</b>	DMSO : 22.73 mg/mL (129.05 mM; Need ultrasonic)			
		<b>Solvent</b>	<b>Mass</b>	
		<b>Concentration</b>	<b>1 mg</b>	<b>5 mg</b>
	<b>Preparing Stock Solutions</b>		<b>10 mg</b>	
	<b>1 mM</b>	5.6776 mL	28.3881 mL	56.7762 mL
	<b>5 mM</b>	1.1355 mL	5.6776 mL	11.3552 mL
	<b>10 mM</b>	0.5678 mL	2.8388 mL	5.6776 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 >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (11.81 mM); Clear solution			

### BIOLOGICAL ACTIVITY

<b>Description</b>	Allantoic acid is a degradative product of uric acid and associated with purine metabolism <sup>[1][2][3]</sup> .
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### REFERENCES

- [1]. Taherkhani A, et, al. Metabolomic Analysis of Membranous Glomerulonephritis: Identification of a Diagnostic Panel and Pathogenic Pathways. Arch Med Res. 2019 May; 50(4):159-169.
- [2]. Okumura I, et, al. Stereospecificity of conversion of uric acid into allantoic acid by enzymes of *Candida utilis*. J Biochem. 1976 May;79(5):1013-9.
- [3]. Cai HL, et, al. Therapeutic efficacy of atypical antipsychotic drugs by targeting multiple stress-related metabolic pathways. Transl Psychiatry. 2017 May 16; 7(5):e1130.

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

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