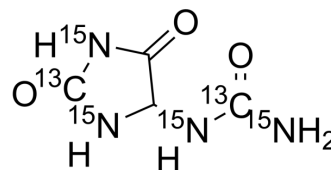


Allantoin-¹³C₂,¹⁵N₄

Cat. No.:	HY-N0543S		
CAS No.:	1219402-51-3		
Molecular Formula:	C ₂ ¹³ C ₂ H ₆ ¹⁵ N ₄ O ₃		
Molecular Weight:	164.07		
Target:	Imidazoline Receptor; Endogenous Metabolite		
Pathway:	Neuronal Signaling; Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (304.75 mM; Need ultrasonic and warming)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	6.0950 mL	30.4748 mL	60.9496 mL
5 mM	1.2190 mL	6.0950 mL	12.1899 mL
10 mM	0.6095 mL	3.0475 mL	6.0950 mL

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

BIOLOGICAL ACTIVITY

Description

Allantoin-¹³C₂,¹⁵N₄ is the ¹³C and ¹⁵N labeled Allantoin[1]. Allantoin is a skin conditioning agent that promotes healthy skin, stimulates new and healthy tissue growth[2].

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^[1].

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 Feb;53(2):211-216.
- [2]. Ahn YJ, et al. Effects of allantoin on cognitive function and hippocampal neurogenesis. *Food Chem Toxicol*. 2014 Feb;64:210-6.

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

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