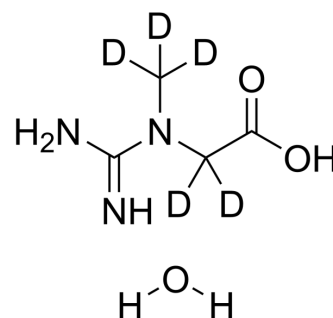


Creatine-d₅ monohydrate

Cat. No.:	HY-W017462S		
Molecular Formula:	C ₄ H ₆ D ₅ N ₃ O ₃		
Molecular Weight:	154.18		
Target:	Endogenous Metabolite; Isotope-Labeled Compounds		
Pathway:	Metabolic Enzyme/Protease; Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Creatine-d ₅ (monohydrate) is the deuterium labeled Creatine monohydrate. Creatine monohydrate, an endogenous amino acid derivative, plays an important role in cellular energy, especially in muscle and brain[1].
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;53(2):211-216.
- [2]. Nouioua S, et al. Creatine deficiency syndrome. A treatable myopathy due to arginine-glycine amidinotransferase (AGAT) deficiency. *Neuromuscul Disord*. 2013 Aug;23(8):670-4.

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