



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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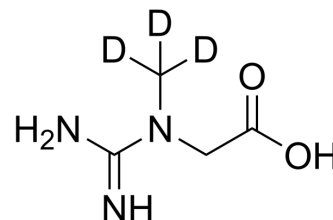
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## Creatine-d<sub>3</sub>

<b>Cat. No.:</b>	HY-W010388S1		
<b>CAS No.:</b>	143827-19-4		
<b>Molecular Formula:</b>	C <sub>4</sub> H <sub>6</sub> D <sub>3</sub> N <sub>3</sub> O <sub>2</sub>		
<b>Molecular Weight:</b>	134.15		
<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

#### In Vitro

H<sub>2</sub>O : 20.83 mg/mL (155.27 mM; ultrasonic and warming and heat to 60°C)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	7.4543 mL	37.2717 mL	74.5434 mL
	5 mM	1.4909 mL	7.4543 mL	14.9087 mL
	10 mM	0.7454 mL	3.7272 mL	7.4543 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Creatine-d<sub>3</sub> is the deuterium labeled Creatine[1]. Creatine, an endogenous amino acid derivative, plays an important role in cellular energy, especially in muscle and brain[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<sup>[1]</sup>.

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]. 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.

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

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