



# 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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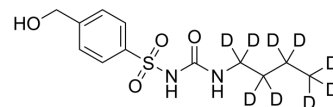
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## 4-Hydroxytolbutamide-d<sub>9</sub>

<b>Cat. No.:</b>	HY-100641S		
<b>CAS No.:</b>	1185112-19-9		
<b>Molecular Formula:</b>	C <sub>12</sub> H <sub>9</sub> D <sub>9</sub> N <sub>2</sub> O <sub>4</sub> S		
<b>Molecular Weight:</b>	295.4		
<b>Target:</b>	Autophagy; Potassium Channel		
<b>Pathway:</b>	Autophagy; Membrane Transporter/Ion Channel		
<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

Ethanol : 12 mg/mL (40.62 mM; Need ultrasonic and warming)

Concentration	Mass			
	1 mg	5 mg	10 mg	
1 mM	3.3852 mL	16.9262 mL	33.8524 mL	
5 mM	0.6770 mL	3.3852 mL	6.7705 mL	
10 mM	0.3385 mL	1.6926 mL	3.3852 mL	

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

### BIOLOGICAL ACTIVITY

#### Description

4-Hydroxytolbutamide-d<sub>9</sub> is the deuterium labeled 4-Hydroxytolbutamide. 4-Hydroxytolbutamide (Hydroxytolbutamide) is a metabolite of Tolbutamide. 4-Hydroxytolbutamide is metabolized by CYP2C8 and CYP2C9. Tolbutamide is a first generation potassium channel blocker and a sulfonyleurea oral antidiabetic<sup>[1][2]</sup>.

#### 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;53(2):211-216.

[2]. Hansen LL, et al. Quantitative determination of tolbutamide and its metabolites in human plasma and urine by high-performance liquid chromatography and UV

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detection. Ther Drug Monit. 1999 Dec;21(6):664-71.

[3]. Yuan R, et al. Evaluation of cytochrome P450 probe substrates commonly used by the pharmaceutical industry to study in vitro drug interactions. Drug Metab Dispos. 2002 Dec;30(12):1311-9.

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

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