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Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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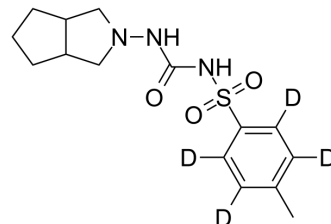
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Gliclazide-d₄

Cat. No.:	HY-B0753S		
CAS No.:	1185039-30-8		
Molecular Formula:	C ₁₅ H ₁₇ D ₄ N ₃ O ₃ S		
Molecular Weight:	327.44		
Target:	Potassium Channel		
Pathway:	Membrane Transporter/Ion Channel		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (305.40 mM)
 DMSO : ≥ 100 mg/mL (305.40 mM)
 H₂O : 0.1 mg/mL (0.31 mM; Need ultrasonic)
 H₂O : 0.1 mg/mL (0.31 mM; Need ultrasonic)
 * "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	3.0540 mL	15.2700 mL	30.5399 mL
	5 mM	0.6108 mL	3.0540 mL	6.1080 mL
	10 mM	0.3054 mL	1.5270 mL	3.0540 mL

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

BIOLOGICAL ACTIVITY

Description

Gliclazide-d₄ (S1702 D4) is the deuterium labeled Gliclazide. Gliclazide (S1702) is a whole-cell beta-cell ATP-sensitive potassium currents blocker with an IC₅₀ of 184 nM. Gliclazide is used as an antidiabetic[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]. Shimoyama, T., et al., Gliclazide protects 3T3L1 adipocytes against insulin resistance induced by hydrogen peroxide with restoration of GLUT4 translocation. *Metabolism*, 2006. 55(6): p. 722-30.

[3]. Lawrence, C.L., et al., Gliclazide produces high-affinity block of KATP channels in mouse isolated pancreatic beta cells but not rat heart or arterial smooth muscle cells. *Diabetologia*, 2001. 44(8): p. 1019-25.

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

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