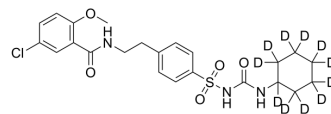


Glyburide-d₁₁

Cat. No.:	HY-15206S
CAS No.:	1189985-02-1
Molecular Formula:	C ₂₃ H ₁₇ D ₁₁ ClN ₃ O ₅ S
Molecular Weight:	505.07
Target:	P-glycoprotein; Autophagy; Potassium Channel; CFTR; Mitochondrial Metabolism; Isotope-Labeled Compounds
Pathway:	Membrane Transporter/Ion Channel; Autophagy; Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Glyburide-d ₁₁ is the deuterium labeled Glibenclamide. Glibenclamide (Glyburide) is an orally active ATP-sensitive K ⁺ channel (KATP) inhibitor and can be used for the research of diabetes and obesity[1]. Glibenclamide inhibits P-glycoprotein. Glibenclamide directly binds and blocks the SUR1 subunits of KATP and inhibits the cystic fibrosis transmembrane conductance regulator protein (CFTR)[3]. Glibenclamide interferes with mitochondrial bioenergetics by inducing changes on membrane ion permeability[4]. Glibenclamide can induce autophagy[5].
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

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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