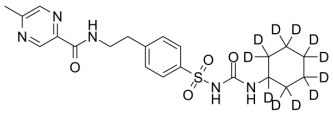
Glipizide-d11

Cat. No.:	HY-B0254S
CAS No.:	1189426-07-0
Molecular Formula:	$C_{21}H_{16}D_{11}N_5O_4S$
Molecular Weight:	456.6
Target:	Potassium Channel
Pathway:	Membrane Transporter/Ion Channel
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Glipizide-d11 is the deuterium labeled Glipizide. Glipizide (CP 2872; K 4024) a potent, orally active and sulfonylurea class anti-diabetic agent and can be used for type 2 diabetes mellitus research but not type 1. Glipizide acts by partially blocking ATP-sensitive potassium (K_{ATP}) channels among β cells of pancreatic islets of Langerhans[1][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[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]. B J Zünkler, et al. Concentration-dependent effects of tolbutamide, meglitinide, glipizide, glibenclamide and diazoxide on ATP-regulated K+ currents in pancreatic B-cells. Naunyn Schmiedebergs Arch Pharmacol. 1988 Feb;337(2):225-30.

[3]. Glipizide. From Wikipedia

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