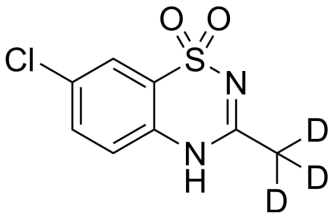
Diazoxide-d_3

Cat. No.:	HY-B1140S
CAS No.:	1432063-51-8
Molecular Formula:	$C_8H_4D_3ClN_2O_2S$
Molecular Weight:	233.69
Target:	Autophagy; Potassium Channel; Isotope-Labeled Compounds
Pathway:	Autophagy; Membrane Transporter/Ion Channel; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Diazoxide-d_3 is deuterium labeled Diazoxide. Diazoxide (Sch-6783) is an ATP-sensitive potassium channel activator, has the potential for hyperinsulinism treatment.
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]. Chowdhury UR, et al. ATP-sensitive potassium (K(ATP)) channel openers diazoxide and nicorandil lower intraocular pressure in vivo. Invest Ophthalmol Vis Sci. 2013 Jul 22;54(7):4892-9.

[3]. Coetzee WA, et al. Multiplicity of effectors of the cardioprotective agent, diazoxide. Pharmacol Ther. 2013 Nov;140(2):167-75.

[4]. Virgili N, et al. K(ATP) channel opener diazoxide prevents neurodegeneration: a new mechanism of action viaantioxidative pathway activation. PLoS One. 2013 Sep 11;8(9):e75189.

[5]. Wu H, et al. Diazoxide Attenuates Postresuscitation Brain Injury in a Rat Model of Asphyxial Cardiac Arrest by Opening Mitochondrial ATP-Sensitive Potassium Channels. Biomed Res Int. 2016;2016:1253842.

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