Reserpine-d_9

Cat. No.: HY-N0480S

CAS No.: 84759-11-5

Molecular Formula: $C_{33}H_{31}D_9N_2O_9$

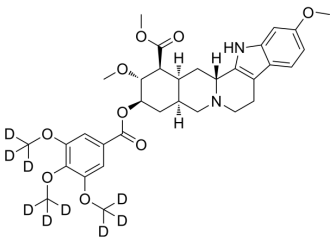
Molecular Weight: 617.73

Target: Monoamine Transporter; Autophagy; Isotope-Labeled Compounds

Pathway: Membrane Transporter/Ion Channel; Autophagy; Others

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 33.33 mg/mL (53.96 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.6188 mL	8.0942 mL	16.1883 mL
	5 mM	0.3238 mL	1.6188 mL	3.2377 mL
	10 mM	0.1619 mL	0.8094 mL	1.6188 mL

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

BIOLOGICAL ACTIVITY

Description

Reserpine-d_9 is the deuterium labeled Reserpine. Reserpine is an inhibitor of the vesicular monoamine transporter 2 (VMAT2).

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]. Antkiewicz-Michaluk L, et al. Withdrawal from repeated administration of a low dose of reserpine induced opposing adaptive changes in the noradrenaline and serotonin system function: a behavioral and neurochemical ex vivo and in vivo studies in the rat. Prog Neuropsychopharmacol Biol Psychiatry. 2015 Mar 3;57:146-54.

[3]. Hong B, et al. Reserpine Inhibit the JB6 P+ Cell Transformation Through Epigenetic Reactivation of Nrf2-Mediated Anti-oxidative Stress Pathway. AAPS J. 2016 May;18(3):659-69.

[4]. Sreemantula S, et al. Reserpine methonitrate, a novel quaternary analogue of reserpine augments urinary excretion of VMA and 5-HIAA without affecting HVA in rats. BMC Pharmacol. 2004 Nov 16;4:30.

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