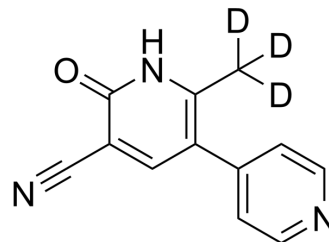


Milrinone-d₃

Cat. No.:	HY-14252S
CAS No.:	2749393-50-6
Molecular Formula:	C ₁₂ H ₆ D ₃ N ₃ O
Molecular Weight:	214.24
Target:	Phosphodiesterase (PDE); Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Milrinone-d ₃ is deuterium labeled Milrinone. Milrinone is a PDE3 inhibitor, and also an inotrope and vasodilator.
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]. Hentschel T, et al. Inhalation of the phosphodiesterase-3 inhibitor milrinone attenuates pulmonary hypertension in a rat model of congestive heart failure. *Anesthesiology*. 2007 Jan;106(1):124-31.
- [3]. Kishi T, et al. Effects of milrinone on left ventricular end-systolic pressure-volume relationship of rat hearts in situ. *Clin Exp Pharmacol Physiol*. 2001 Sep;28(9):737-42.
- [4]. Santhosh KT, et al. Milrinone attenuates thromboxane receptor-mediated hyperresponsiveness in hypoxic pulmonary arterial myocytes. *Br J Pharmacol*. 2011 Jul;163(6):1223-36.
- [5]. Taylor MS, et al. Effect of milrinone on small mesenteric artery vasoconstriction: role of K(+) channels. *Am J Physiol*. 1999 Jul;277(1 Pt 1):G69-78.

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