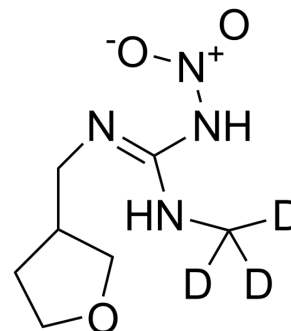


Dinotefuran-d₃

Cat. No.:	HY-B0827S
Molecular Formula:	C ₇ H ₁₁ D ₃ N ₄ O ₃
Molecular Weight:	205.23
Target:	nAChR; Parasite
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling; Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Dinotefuran-d ₃ is the deuterium labeled Dinotefuran[1]. Dinotefuran is an insecticide of the neonicotinoid class, its mechanism of action involves disruption of the insect's nervous system by inhibiting nicotinic acetylcholine receptors[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 Feb;53(2):211-216.
- [2]. Liu T, et al. Biochemical and genetic toxicity of dinotefuran on earthworms (*Eisenia fetida*). *Chemosphere*. 2017 Jun;176:156-164.

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