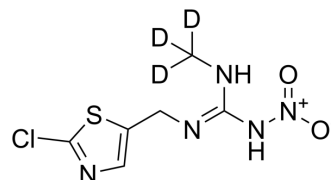


Clothianidin-d₃

Cat. No.:	HY-133167S
CAS No.:	1262776-24-8
Molecular Formula:	C ₆ H ₅ D ₃ ClN ₃ O ₂ S
Molecular Weight:	252.7
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Clothianidin-d ₃ is the deuterium labeled Clothianidin. Clothianidin-d ₃ is a neonicotinoid insecticide. Clothianidin-d ₃ shows excellent long-term control effect in small doses against various insect pests such as Coleoptera, Thysanoptera, Lepidoptera, Diptera, Homoptera, Heteroptera, Orthoptera and Isoptera families. Clothianidin-d ₃ has various application methods and high safety for crops ^{[1][2]} .
In Vitro	Clothianidin-d ₃ (30 nM) exhibits high activity on isolated neurons ^[3] . Clothianidin-d ₃ (1 µg/L; 36 h) shows sublethal effect on monarch butterfly larvae in milkweed ^[4] . Clothianidin-d ₃ (0.25 mg/seed and 0.50 mg/seed) has a low concentration in soil and water in farmland cultivated with corn and soybean ^[5] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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- [2]. Uneme H. Chemistry of clothianidin and related compounds. J Agric Food Chem. 2011 Apr 13;59(7):2932-7.
- [3]. Nauen R, et al. Thiamethoxam is a neonicotinoid precursor converted to clothianidin in insects and plants[J]. Pesticide biochemistry and physiology, 2003, 76(2): 55-69.
- [4]. Pecenka JR, et al. Non-target effects of clothianidin on monarch butterflies. Naturwissenschaften. 2015 Apr;102(3-4):19.
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Caution: Product has not been fully validated for medical applications. For research use only.

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