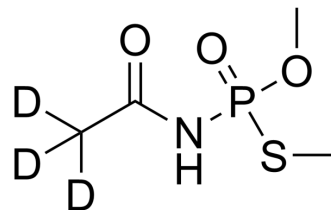


Acephate-d₃

Cat. No.:	HY-B0841S
CAS No.:	2140327-70-2
Molecular Formula:	C ₄ H ₇ D ₃ NO ₃ PS
Molecular Weight:	186.18
Target:	Cholinesterase (ChE); Isotope-Labeled Compounds
Pathway:	Neuronal Signaling; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Acephate-d ₃ is the deuterium labeled Acephate. Acephate is an anticholinesterase insecticide that produces cholinotoxicity. Acephate displays weak inhibition of rat AChE but potently inhibits cockroach AChE.
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.

Caution: Product has not been fully validated for medical applications. For research use only.

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