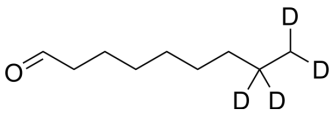
Nonanal-d_4

Cat. No.:	HY-N8016S1
CAS No.:	1335401-96-1
Molecular Formula:	$C_9H_{14}D_4O$
Molecular Weight:	146.26
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Nonanal-d_4 is deuterated labeled Methyl propyl disulfide (HY-N7436). Methyl propyl disulfide is an volatile sulfur-containing compound produced in garlic and onions with anticaner effect[1][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]. Nonanal shows a significant activity against B. cereus and L. monocytogenes, the MIC values are both 7.8 μg/ml[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Nonanal shows a significant inhibitory effect on mice with diarrhoea induced with castor oil[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Miguel A, et al. Antidiarrhoeal Activity of Nonanal, an Aldehyde Isolated from Artemisia ludoviciana. Pharmaceutical Biology Volume 40, 2002 - Issue 4

[2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

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