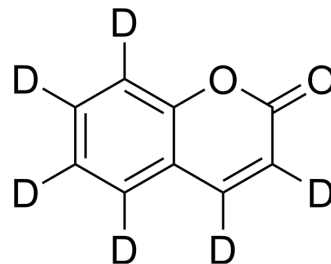


Coumarin-d₆

Cat. No.:	HY-N0709S1
CAS No.:	116295-83-1
Molecular Formula:	C ₉ D ₆ O ₂
Molecular Weight:	152.18
Target:	Bacterial; Fungal; Isotope-Labeled Compounds
Pathway:	Anti-infection; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Coumarin-d ₆ is deuterated labeled trans-2-Undecenal (HY-W127505). Trans-2-Undecenal is an organic compound belonging to aldehydes. It has a strong, pungent smell and is commonly found in a variety of foods, including fruits and vegetables. Trans-2-Undecenal has a variety of applications in the flavor and fragrance industry, especially as a fragrance agent in products such as perfume, cologne and air fresheners. In addition, it can also be used as an intermediate in the synthesis of various chemicals and drugs.
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.
In Vivo	Coumarin (1-10 mg/kg; p.o.) shows an antinociceptive effect in a dose-dependent manner in the acetic acid-induced writhing test ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Park SH, et al. Antinociceptive profiles and mechanisms of orally administered coumarin in mice. *Biol Pharm Bull.* 2013;36(6):925-30.
- [2]. enugopala KN, et al. Review on natural coumarin lead compounds for their pharmacological activity. *Biomed Res Int.* 2013;2013:963248.
- [3]. 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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