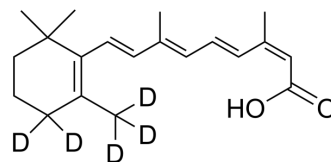


Isotretinoin-d₅

Cat. No.:	HY-15127S
Molecular Formula:	C ₂₀ H ₂₃ D ₅ O ₂
Molecular Weight:	305.47
Target:	RAR/RXR; Endogenous Metabolite; Autophagy; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Vitamin D Related/Nuclear Receptor; Autophagy; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Isotretinoin-d ₅ is the deuterium labeled Isotretinoin. Isotretinoin is an orally active vitamin A derivative and is often be used for the research of severe acne. Isotretinoin also shows anticancer activity ^{[1][2][3]} .
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

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- [3]. Bergoli RD, et al. Isotretinoin effect on alveolar repair after exodontia--a study in rats. *Oral Maxillofac Surg.* 2011 Jun;15(2):85-92.
- [4]. Ramírez-Flores PN, et al. Isotretinoin and Thalidomide Down-Regulate c-MYC Gene Expression and Modify Proteins Associated with Cancer in Hepatic Cells. *Molecules.* 2021 Sep 22;26(19):5742.
- [5]. 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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