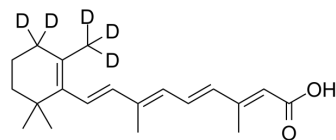


9-cis-Retinoic acid-d5

Cat. No.:	HY-132334S
CAS No.:	78996-15-3
Molecular Formula:	C ₂₀ H ₂₃ D ₅ O ₂
Molecular Weight:	305.47
Target:	RAR/RXR; Apoptosis
Pathway:	Metabolic Enzyme/Protease; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	9-cis-Retinoic acid-d5 (ALRT1057-d5) is the deuterium labeled 9-cis-Retinoic acid. 9-cis-Retinoic acid (ALRT1057), a vitamin A derivative, is a potent RAR/RXR agonist. 9-cis-Retinoic acid induces apoptosis, regulates cell cycle and has anticancer, anti-inflammatory and neuroprotection activities ^{[1][2][3][4][5][6]} .
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;53(2):211-216.
- [2]. Raul Rosas, et al. Retinoids Augment Thiazolidinedione PPARγ Activation in Oral Cancer Cells. *Anticancer Res.* 2020 Jun;40(6):3071-3080.
- [3]. Hua Yang, et al. Effects of 9-cis-retinoic Acid on the Proliferation and Apoptosis of Cutaneous T-cell Lymphoma Cells. *Anticancer Drugs.* 2019 Jan;30(1):56-64.
- [4]. Zhiqing Yuan, et al. 9-cis-retinoic Acid Elevates MRP3 Expression by Inhibiting Sumoylation of RXRα to Alleviate Cholestatic Liver Injury. *Biochem Biophys Res Commun.* 2018 Sep 3;503(1):188-194.
- [5]. V M Manzano, et al. Human Renal Mesangial Cells Are a Target for the Anti-Inflammatory Action of 9-cis Retinoic Acid. *Br J Pharmacol.* 2000 Dec;131(8):1673-83.
- [6]. Gro H Mathisen, et al. Delayed Translocation of NGFI-B/RXR in Glutamate Stimulated Neurons Allows Late Protection by 9-cis Retinoic Acid. *Biochem Biophys Res Commun.* 2011 Oct 14;414(1):90-5.

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

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