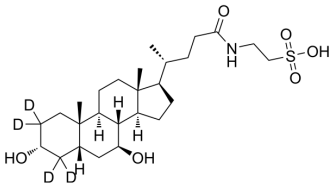
Tauroursodeoxycholate-d4

Cat. No.:	HY-19696S1
CAS No.:	2410279-94-4
Molecular Formula:	$C_{26}H_{41}D_4NO_6S$
Molecular Weight:	503.73
Target:	Apoptosis; Caspase; ERK; Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	Apoptosis; MAPK/ERK Pathway; Stem Cell/Wnt; Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Tauroursodeoxycholate-d4 is deuterium labeled Tauroursodeoxycholate. Tauroursodeoxycholate (Tauroursodeoxycholic acid) is an endoplasmic reticulum (ER) stress inhibitor. Tauroursodeoxycholate significantly reduces expression of apoptosis molecules, such as caspase-3 and caspase-12. Tauroursodeoxycholate also inhibits ERK.
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]. Kim SY, et al. Tauroursodeoxycholate (TUDCA) inhibits neointimal hyperplasia by suppression of ERK viaPKCα-mediated MKP-1 induction. Cardiovasc Res. 2011 Nov 1;92(2):307-16.

[3]. Qin Y, et al. Tauroursodeoxycholic Acid Attenuates Angiotensin II Induced Abdominal Aortic Aneurysm Formation in Apolipoprotein E-deficient Mice by Inhibiting Endoplasmic Reticulum Stress. Eur J Vasc Endovasc Surg. 2017 Mar;53(3):337-345.

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

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