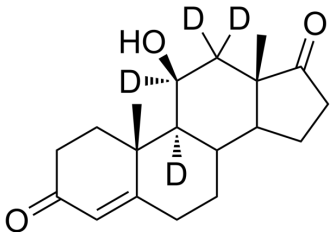
11-Beta-hydroxyandrostenedione-d_4

Cat. No.:	HY-114464S
CAS No.:	2687960-98-9
Molecular Formula:	$C_{19}H_{22}D_4O_3$
Molecular Weight:	306.43
Target:	Endogenous Metabolite; 11β-HSD; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	11-Beta-hydroxyandrostenedione-d_4 is the deuterium labeled 11-Beta-hydroxyandrostenedione. 11-Beta-hydroxyandrostenedione (4-Androsten-11β-ol-3,17-dione) is a steroid mainly found in the the adrenal origin (11β-hydroxylase is present in adrenal tissue, but absent in ovarian tissue). 11-Beta-hydroxyandrostenedione is a 11β-hydroxysteroid dehydrogenase (11βHSD) isozymes inhibitor[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]. 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]. Rachelle Gent, et al. 11α-Hydroxyprogesterone, a potent 11β-hydroxysteroid dehydrogenase inhibitor, is metabolised by steroid-5α-reductase and cytochrome P450 17 αhydroxylase/17,20-lyase to produce C11α-derivatives of 21-deoxycortisol

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA