Product Data Sheet

11-Beta-hydroxyandrostenedione-d7

Cat. No.: HY-114464S1 CAS No.: 2331287-27-3 Molecular Formula: $C_{19}H_{19}D_7O_3$ Molecular Weight: 309.45

 Target:
 Endogenous Metabolite; 11β-HSD

 Pathway:
 Metabolic Enzyme/Protease

 Storage:
 Powder -20°C 3 years

 $\begin{array}{ccc} & 4^{\circ}\text{C} & 2 \text{ years} \\ \text{In solvent} & -80^{\circ}\text{C} & 6 \text{ months} \\ & -20^{\circ}\text{C} & 1 \text{ month} \end{array}$

BIOLOGICAL ACTIVITY

Description

11-Beta-hydroxyandrostenedione-d₇ 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 α hydroxylase/17,20-lyase to produce C11 α -derivatives of 21-deoxycortisol

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

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