Aldosterone-d_7

Cat. No.: HY-113313S1

Molecular Formula: $C_{21}H_{21}D_7O_5$

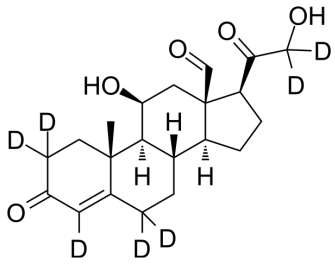
Molecular Weight: 367.49

Target: Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (272.12 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.7212 mL	13.6058 mL	27.2116 mL
	5 mM	0.5442 mL	2.7212 mL	5.4423 mL
	10 mM	0.2721 mL	1.3606 mL	2.7212 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Aldosterone-d_7 is the deuterium labeled Aldosterone. Aldosterone is the primary mineralocorticoid. Aldosterone is a steroid hormone, and it is synthesized and secreted in response to renin-angiotensin system activation (RAS) or high dietary potassium by the zona glomerulosa (ZG) of the adrenal cortex. Aldosterone activity is dependent by the binding and activation of the cytoplasmic/nuclear mineralocorticoid receptor (MR) at cellular level[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

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[4]. Ikeda U, et al. Aldosterone inhibits nitric oxide synthesis in rat vascular smooth muscle cells induced by interleukin-1 beta. Eur J Pharmacol. 1995 Jul 18;290(2):69-73.

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