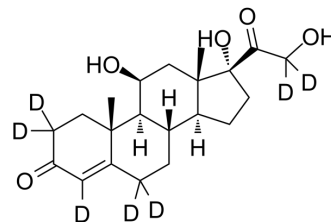


Hydrocortisone-d₇

Cat. No.:	HY-N0583S1		
Molecular Formula:	C ₂₁ H ₂₃ D ₇ O ₅		
Molecular Weight:	369.5		
Target:	Glucocorticoid Receptor; Endogenous Metabolite		
Pathway:	Immunology/Inflammation; Vitamin D Related/Nuclear Receptor; Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Hydrocortisone-d ₇ is the deuterium labeled Hydrocortisone. Hydrocortisone (Cortisol) is a steroid hormone or glucocorticoid secreted by the adrenal cortex[1].
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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- [2]. Förster C, et al. Differential effects of hydrocortisone and TNFalpha on tight junction proteins in an in vitro model of the human blood-brain barrier. *J Physiol.* 2008 Apr 1;586(7):1937-49.
- [3]. Bellinghausen I, et al. Inhibition of human allergic T-cell responses by IL-10-treated dendritic cells: differences from hydrocortisone-treated dendritic cells. *J Allergy Clin Immunol.* 2001 Aug;108(2):242-9.
- [4]. Chappell D, et al. Hydrocortisone preserves the vascular barrier by protecting the endothelial glycocalyx. *Anesthesiology.* 2007 Nov;107(5):776-84.

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

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