Product Data Sheet

Corticosterone-13C3

Cat. No.: HY-W751099

Molecular Formula: $C_{18}^{13}C_{3}H_{30}O_{4}$ Molecular Weight: 349.44

Target: Isotope-Labeled Compounds

Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Corticosterone- 13 C ₃ is a 13 C-labeled corticosterone (HY-B1618). Corticosterone (17-Deoxycortisol) is an orally available glucocorticoid that can regulate limbic system neurons and has good immunosuppressive activity.
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]. Elftman MD, et al. Corticosterone impairs dendritic cell maturation and function. Immunology. 2007 Oct;122(2):279-90.

[2]. Schaaf MJ, et al. Downregulation of BDNF mRNA and protein in the rat hippocampus by corticosterone. Brain Res. 1998 Nov 30;813(1):112-20.

[3]. Fahlke C, et al. Involvement of corticosterone in the modulation of ethanol consumption in the rat. Alcohol. 1994 May-Jun;11(3):195-202.

[4]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

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

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