Product Data Sheet

Eplerenone-d3

Cat. No.: HY-B0251S Molecular Formula: $C_{24}H_{27}D_3O_6$

Molecular Weight: 417.51

Target: Mineralocorticoid Receptor; Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

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

Analysis.

BIOLOGICAL ACTIVITY

Description	Eplerenone-d3 (Epoxymexrenone-d3) is the deuterium labeled Eplerenone. Eplerenone (Epoxymexrenone) is a selective, competitive and oreally active aldosterone antagonist with an IC $_{50}$ of 138 nM. Eplerenone has low affinity for progesterone, androgen, estrogen and glucocorticoid receptors. Eplerenone can be used for hypertension and heart failure after myocardial infarction reserch ^{[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

 $[1]. Russak \, EM, \, et \, al. \, Impact \, of \, Deuterium \, Substitution \, on \, the \, Pharmacokinetics \, of \, Pharmaceuticals. \, Ann \, Pharmacother. \, 2019; \\ 53(2): 211-216.$

 $[2]. \ Dhillon, S., Eplerenone: a review of its use in patients with chronic systolic heart failure and mild symptoms. Drugs, 2013. 73(13): p. 1451-62.$

[3]. Marvin J Meyers, et al. Discovery of (3S,3aR)-2-(3-chloro-4-cyanophenyl)-3-cyclopentyl-3,3a,4,5-tetrahydro-2H-benzo[g]indazole-7-carboxylic acid (PF-3882845), an orally efficacious mineralocorticoid receptor (MR) antagonist for hypertension and nephropathy. J Med Chem. 2010 Aug 26;53(16):5979-6002.

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