Product Data Sheet

Entinostat-d₄

Cat. No.: HY-12163S Molecular Formula: $C_{21}H_{16}D_4N_4O_3$ Molecular Weight: 380.43

Target: Apoptosis; Autophagy; HDAC

Pathway: Apoptosis; Autophagy; Cell Cycle/DNA Damage; Epigenetics

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

Analysis.

BIOLOGICAL ACTIVITY

Description	Entinostat- d_4 is the deuterium labeled Entinostat[1]. Entinostat is an oral and selective class I HDAC inhibitor, with IC50s of 243 nM, 453 nM, and 248 nM for HDAC1, HDAC2, and HDAC3, respectively[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 Feb;53(2):211-216.

[2]. Lauffer BE, et al. Histone deacetylase (HDAC) inhibitor kinetic rate constants correlate with cellular histone acetylation but not transcription and cell viability. J Biol Chem. 2013 Sep 13;288(37):26926-43.

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