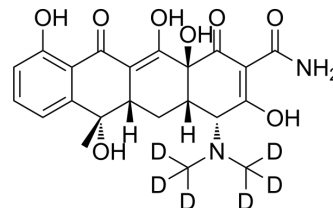


## 4-Epitetracycline-d<sub>6</sub>

<b>Cat. No.:</b>	HY-W701205
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>18</sub> D <sub>6</sub> N <sub>2</sub> O <sub>8</sub>
<b>Molecular Weight:</b>	450.47
<b>Target:</b>	Isotope-Labeled Compounds; Antibiotic
<b>Pathway:</b>	Others; Anti-infection
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	4-Epitetracycline-d <sub>6</sub> is deuterated labeled 4-Epitetracycline hydrochloride (HY-136443) 4-Epitetracycline hydrochloride is an epimer of Tetracycline (HY-A0107). Tetracycline can undergo epimerization insolution to 4-Epitetracycline hydrochloride, which shows a much lower antibiotic activity.
<b>In Vitro</b>	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 <sup>[1]</sup> . 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]. Lin Z, et al. Effects of two ecological earthworm species on tetracycline degradation performance, pathway and bacterial community structure in laterite soil. *J Hazard Mater.* 2021 Jun 15;412:125212.

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

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