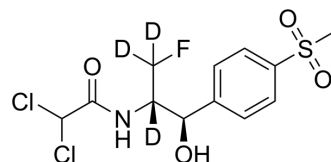


## ent-Florfenicol-d<sub>3</sub>

<b>Cat. No.:</b>	HY-B1374S
<b>CAS No.:</b>	1217619-10-7
<b>Molecular Formula:</b>	C <sub>12</sub> H <sub>11</sub> D <sub>3</sub> Cl <sub>2</sub> FNO <sub>4</sub> S
<b>Molecular Weight:</b>	361.23
<b>Target:</b>	Bacterial; Antibiotic
<b>Pathway:</b>	Anti-infection
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	ent-Florfenicol-d <sub>3</sub> is the deuterium labeled Florfenicol. Florfenicol, a commonly used veterinary antibiotic, is currently indicated for the treatment of bovine respiratory disease, and also used in aquaculture for the control of enteric septicemia in catfish. Florfenicol can induce early embryonic death in eggs, with an LC <sub>50</sub> of 1.07 µg/g.
<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]. Al-Shahrani S, et al. Florfenicol induces early embryonic death in eggs collected from treated hens. *BMC Vet Res.* 2015 Aug 18;11(1):213.
- [3]. Corinna Kehrenberg, et al. A new mechanism for chloramphenicol, florfenicol and clindamycin resistance: methylation of 23S ribosomal RNA at A2503. *Molecular Microbiology* Volume 57, Issue 4, pages 1064–1073, August 2005

**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