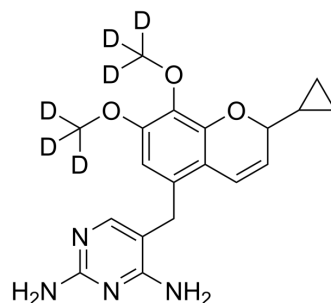


Iclaprim-d₆

Cat. No.:	HY-101479S
CAS No.:	1130072-57-9
Molecular Formula:	C ₁₉ H ₁₆ D ₆ N ₄ O ₃
Molecular Weight:	360.44
Target:	Bacterial; Antibiotic; Isotope-Labeled Compounds
Pathway:	Anti-infection; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Iclaprim-d ₆ (AR-100-d6) is the deuterium labeled Iclaprim. Iclaprim is a new selective bacterial Dihydrofolate inhibitor, which can inhibit the growth of <i>S. aureus</i> (MRSA) with an MIC ₉₀ of 0.06 µg/mL.
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]. Schneider P, et al. Iclaprim, a novel diaminopyrimidine with potent activity on trimethoprim sensitive and resistant bacteria. *Bioorg Med Chem Lett.* 2003 Dec 1;13(23):4217-21.
- [3]. Kohlhoff SA, et al. Iclaprim. *Expert Opin Investig Drugs.* 2007 Sep;16(9):1441-8.

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

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