## **Product** Data Sheet

Inhibitors

**Screening Libraries** 

## Dalbavancin-d<sub>6</sub>

 Cat. No.:
 HY-17586AS

 CAS No.:
 1126461-54-8

 Molecular Formula:
  $C_{88}H_{94}D_6Cl_2N_{10}O_{28}$ 

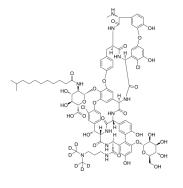
Molecular Weight: 1822.73

Target: Bacterial; Antibiotic

Pathway: Anti-infection

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

Analysis.



## **BIOLOGICAL ACTIVITY**

Description	Dalbavancin- $d_6$ is the deuterium labeled Dalbavancin[1]. Dalbavancin (MDL-63397) is a semisynthetic lipoglycopeptide antibiotic with potent bactericidal activity against Gram-positive bacteria. Dalbavancin inhibits Staphylococcus aureus and Bacillus anthracis with MIC90s of 0.06 $\mu$ g/mL and 0.25 $\mu$ g/mL, respectively[2][3].
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 <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

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

[2]. Heine HS, et al. Activity of dalbavancin against Bacillus anthracis in vitro and in a mouse inhalation anthrax model. Antimicrob Agents Chemother. 2010 Mar;54(3):991-6.

[3]. Bennett JW, et al. Dalbavancin in the treatment of complicated skin and soft-tissue infections: a review. Ther Clin Risk Manag. 2008 Feb4(1):31-40.

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

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