## **Product** Data Sheet

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

 Cat. No.:
 HY-B0129S

 CAS No.:
 1127452-94-1

 Molecular Formula:
 C<sub>13</sub>H<sub>11</sub>D<sub>6</sub>N<sub>5</sub>O<sub>8</sub>S<sub>2</sub>

Molecular Weight: 441.47

Target: Bacterial; Antibiotic; Isotope-Labeled Compounds

Pathway: Anti-infection; Others

Storage: -20°C, protect from light, stored under nitrogen

\* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light, stored under

nitrogen)

## **BIOLOGICAL ACTIVITY**

Description	Aztreonam-d <sub>6</sub> is deuterium labeled Aztreonam. Aztreonam (SQ-26,776) is a synthetic monocyclic beta-lactam antibiotic, which has a very high affinity for penicillin-binding protein 3 (PBP-3).
IC <sub>50</sub> & Target	β-lactam
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;53(2):211-216.

[2]. Guay DR, et al. Aztreonam, a new monobactam antimicrobial. Clin Pharm. 1985 Sep-Oct;4(5):516-26.

[3]. Kobayashi Y, et al. Synergy with aztreonam and arbekacin or tobramycin against Pseudomonas aeruginosa isolated from blood. J Antimicrob Chemother. 1992 Dec;30(6):871-2.

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

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