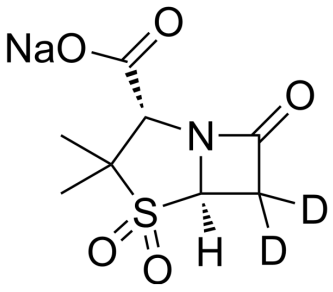
Sulbactam-d2 sodium

Cat. No.:	HY-B0334AS1
CAS No.:	948027-82-5
Molecular Formula:	$C_8H_8D_2NNaO_5S$
Molecular Weight:	257.24
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Sulbactam-d_2 (sodium) is the deuterium labeled Sulbactam sodium[1]. Sulbactam (CP45899) sodium is a competitive, irreversible beta-lactamase inhibitor. Sulbactam sodium shows antimicrobial activity against multidrug-resistant (MDR) acinetobacter calcoaceticus--Acinetobacter baumannii (Acb) complex[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[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 Feb;53(2):211-216.

[2]. Noguchi JK, et al. Sulbactam: a beta-lactamase inhibitor. Clin Pharm. 1988;7(1):37-51.

[3]. Lin HS, et al. Sulbactam treatment for pneumonia involving multidrug-resistant Acinetobacter calcoaceticus-Acinetobacter baumannii complex. Infect Dis (Lond). 201547(6):370-378.

[4]. Betrosian AP, et al. Ampicillin-sulbactam: an update on the use of parenteral and oral forms in bacterial infections. Expert Opin Drug Metab Toxicol. 20095(9):1099-1112.

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