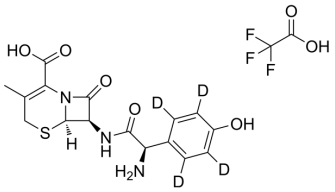
Cefadroxil-d_4 trifluoroacetate

Cat. No.:	HY-B1190S1
Molecular Formula:	$C_{18}H_{14}D_4F_3N_3O_7S$
Molecular Weight:	481.44
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	Cefadroxil-d_4 (trifluoroacetate) is deuterium labeled Cefadroxil.
IC_{50} & 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[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]. Chen X, et al. Influence of peptide transporter 2 (PEPT2) on the distribution of cefadroxil in mouse brain: A microdialysis study. Biochem Pharmacol. 2017 May 1;131:89-97.

[3]. Hu Y, et al. Species differences in the pharmacokinetics of cefadroxil as determined in wildtype and humanized PepT1 mice. Biochem Pharmacol. 2016 May 1;107:81-90.

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

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