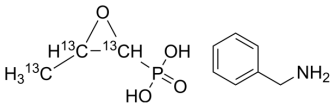
(Rac)-Fosfomycin (benzylamine)-13C3

Cat. No.:	HY-B1075AS
CAS No.:	1216461-18-5
Molecular Formula:	$C_7{}^{13}C_3H_{16}NO_4P$
Molecular Weight:	248.19
Target:	Bacterial; Antibiotic
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	(Rac)-Fosfomycin (benzylamine)-$^{13}C_3$ is the ^{13}C labeled Fosfomycin[1]. Fosfomycin (MK-0955) is a broad-spectrum antibiotic. Fosfomycin can cross blood-brain barrier penetrating, and irreversibly inhibits an early stage in cell wall synthesis. Fosfomycin shows anti-bacteria activity for a range of bacteria, including multidrug-resistant (MDR), extensively drug-resistant (XDR), and pan-drug-resistant (PDR) bacteria[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]. Falagas ME, et al. Fosfomycin. Clin Microbiol Rev. 2016 Apr. 29(2):321-47.

[3]. Dijkmans AC, et al. Fosfomycin: Pharmacological, Clinical and Future Perspectives. Antibiotics (Basel). 2017 Oct 31. 6(4):24.

[4]. Inouye S, et al. Mode of protective action of fosfomycin against dibekacin-induced nephrotoxicity in the dehydrated rats. J Pharmacobiodyn. 1982 Dec. 5(12):941-50.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA