## Nitrofurantoin-<sup>13</sup>C<sub>3</sub>

Cat. No.:	HY-A0090S	
CAS No.:	1217226-46-4	$\begin{array}{c} HN - 13 C \\ O^{-13}C \\ H_2 \\ H_2 \\ \end{array} \\ N \\ O^{-13}C \\ N^+ \\ O^{-13}C \\ N^+ \\ O^{-13}C \\ O^{-13}C \\ N^+ \\ O^{-13}C $
Molecular Formula:	$C_{5}^{13}C_{3}H_{6}N_{4}O_{5}$	
Molecular Weight:	241.14	
Target:	Isotope-Labeled Compounds	
Pathway:	Others	
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.	

	BIOLOGICAL ACTIVITY		
	Description	Nitrofurantoin- <sup>13</sup> C <sub>3</sub> is the <sup>13</sup> C labeledNitrofurantoin(HY-A0090) <sup>[1]</sup> . Nitrofurantoin is a potent and orally active broad- spectrum beta-lactamase antimicrobial agent. Nitrofurantoin acts as an antibiotic and can be used for the study of urinary tract infections (UTIs), including cystitis and kidney infections <sup>[2]</sup> .	
	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.

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

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

Product Data Sheet

