

## **Product** Data Sheet

## Amoxicillin-13C<sub>6</sub>

Molecular Weight: 371.36

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	Amoxicillin- $^{13}$ C <sub>6</sub> is the $^{13}$ C <sub>6</sub> labeled Amoxicillin. Amoxicillin is an antibiotic with good oral absorption and broad spectrum antimicrobial activity.
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]. Geddes AM, et al. Introduction: historical perspective and development of amoxicillin/clavulanate. Int J Antimicrob Agents. 2007 Dec;30 Suppl 2:S109-12.

[2]. Handsfield HH,et al. Amoxicillin, a new penicillin antibiotic. Antimicrob Agents Chemother. 1973 Feb;3(2):262-5.

 $[3]. \ Russak\ EM, et\ al.\ Impact\ of\ Deuterium\ Substitution\ on\ the\ Pharmacokinetics\ of\ Pharmaceuticals.\ Ann\ Pharmacother.\ 2019\ Feb;\\ 53(2):211-216.$ 

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