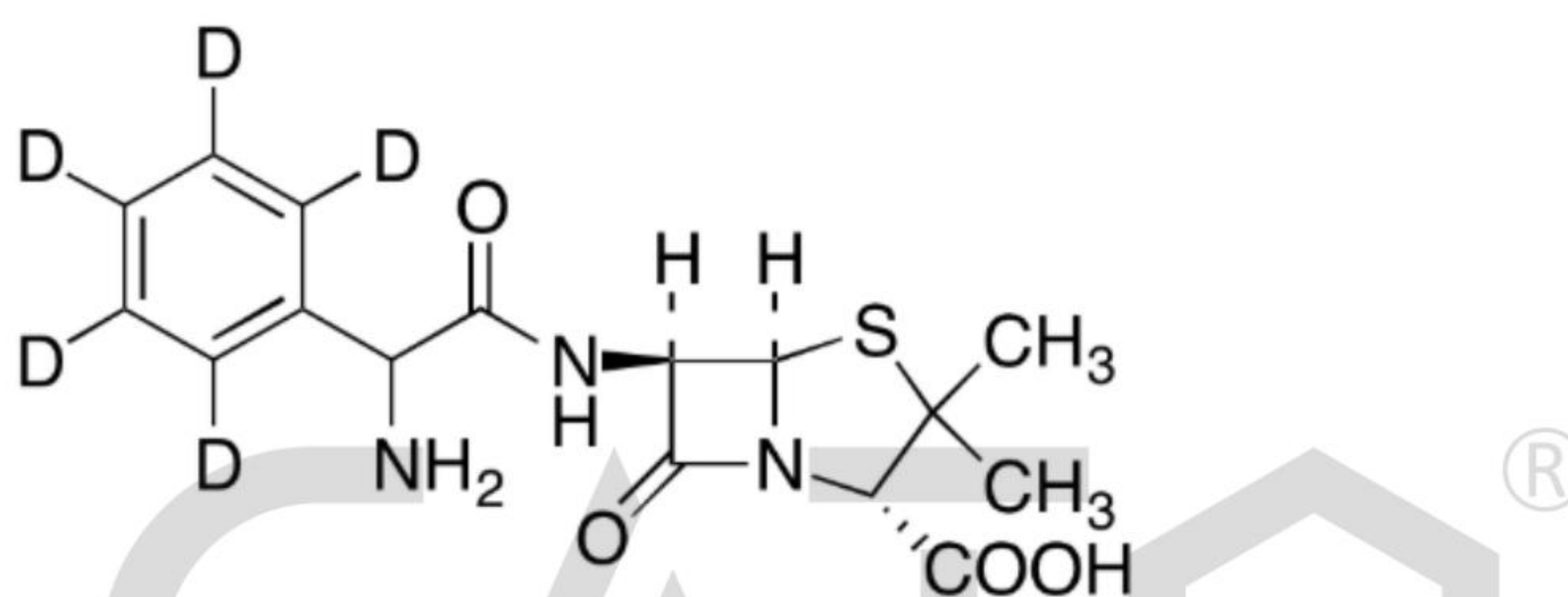


Certificate of Analysis

Reference Material

Product Name:	Ampicillin-d5	Catalogue Number:	CCAD301965
Chemical Name:	N/A	Lot Number:	0530-RD-0062
CAS Number:	1426173-65-0	Expiry Date:	Mar 07, 2024
Molecular Formula:	C ₁₆ H ₁₄ D ₅ N ₃ O ₄ S	Storage:	-20°C±5°C Protected from light and Sealed
Molecular Weight:	354.44		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Colourless Solid
Identification	HNMR	Confirmed
Chemical Purity	HPLC	96.28%
Isotopic Purity		99.7%
Water Content	Karl Fischer	7.4%
Assay		89.2%
Uncertainty		±2.0%

Comment:

1. The calculation of the 100% method follows the formula:

$$\text{Assay (\%)} = (100\% - \text{Water Content}) * \text{Purity HPLC (\%)} / 100\%$$

Water Content is considered as absolute effect, HPLC purity is considered as relative effect.

2. The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by:

Xenia

Reviewed by:

Cady

Aporoved by General manager:

David

Date: May 08, 2019

Date: May 31, 2022

Date: May 31, 2022

