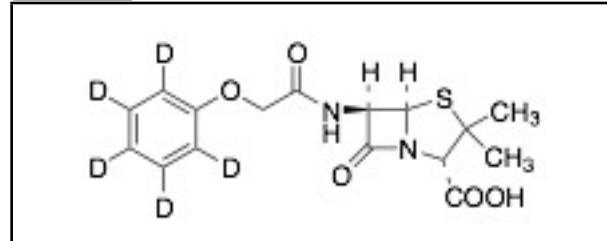


CERTIFICATE OF ANALYSIS**1. Identification**

Catalogue Number P223502
Product Name Penicillin V-d5

Lot Number 11-SWZ-131-1

StructureSynonyms

(2S,5R,6R)-3,3-Dimethyl-7-oxo-6-[(2-phenoxy-d5-acetyl)amino]-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic Acid; 6-(Phenoxy-d5-acetamido)penicillanic Acid; Phenoxymethylpenicillin-d5; Phenospen-d5; Oracilline-d5; V-Cillin-d5;

CAS Number

1356837-87-0

Solubility

Chloroform (Slightly), DMSO (Slightly)

Shipping Condition

This Product Is Stable To Be Shipped At Room Temperature

Molecular Formula

C₁₆H₁₃D₅N₂O₅S

Source of Product

Synthetic

Long Term Storage Conditions

-20°C

Molecular Weight

355.42

Purity

>95%

2. Warnings

Not Determined

3. Analytical Information

<u>Tests</u>	<u>Specifications</u>	<u>Results</u>
Appearance	White to Off-White Solid	White to Off-White Solid
NMR	Conforms to Structure	Conforms
HPLC Purity	>95%	96.72% (205 nm)
MS	Conforms to Structure	Conforms
Isotopic Purity	>95%	98.3%

Additional Information

Normalized Intensity: d₀ = 0.00%, d₁ = 0.00%, d₂ = 0.00%, d₃ = 0.15%, d₄ = 8.18%, d₅ = 91.66%

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of $\pm 2\%$. Isotopic purity is based on mass distribution observed.

The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

<u>Reviewed by</u>	<u>Reviewed by</u>	<u>C of A Approved by</u>	<u>Test Date</u>	<u>Retest Date</u>
			5/4/2023	5/2/2027
Swathi Reddy Product Quality Specialist	Toni Rantanen Manager, Quality Assurance	Chanell Chu Jr. Quality Assurance		