



CERTIFICATE OF ANALYSIS

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1. Identification

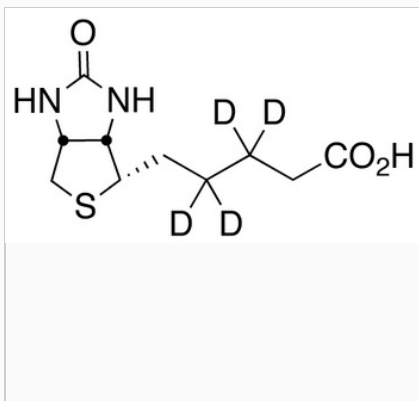
Catalogue Number: B389042

CAS Number: 1217850-77-5

Product: rac Biotin-d4

Synonym: rel-(3aS,4S,6aR)-Hexahydro-2-oxo-1H-thieno[3,4-d]imidazole-4-pentanoic Acid-d4;

Structure:



Molecular Formula:

C₁₀H₁₂D₄N₂O₃S

Molecular weight:

248.34

Source of Product:

Synthetic

Solubility:

Aqueous Base (Slightly),
DMSO (Slightly), Methanol
(Slightly, Sonicated)

Lot Number: 9-WAI-45-1

Purity: 98%

Shipping Condition: This Product Is Stable To Be
Shipped At Room Temperature

Storage Condition: -20°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	White to Off-White Solid	Off-White Solid
NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 47.77, %H: 6.36, %N: 11.71
HPLC Purity	Report Result	99.85% (ELSD)
MS	Conforms to Structure	Conforms
Isotopic Purity	>95%	98.3%

Additional Information:

Normalized Intensity: d0 = 0.02%, d1 = 0.01%, d2 = 0.20%, d3 = 6.25%, d4 = 93.53%

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

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Henry Tieu	Toni Rantanen	Chanell Chu	4/13/2023	4/11/2027