



CERTIFICATE OF ANALYSIS

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1. Identification

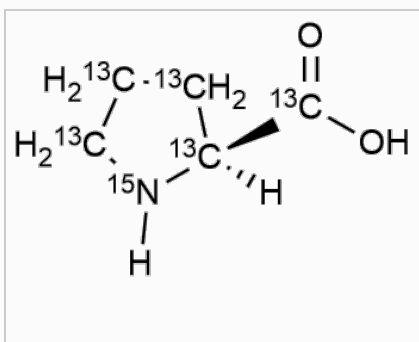
Catalogue Number: P755998

CAS Number: NA

Product: L-Proline-13C5,15N

Synonym: (-)-2-Pyrrolidinecarboxylic Acid-13C5,15N; (-)-Proline-13C5,15N; (S)-(-)-Proline-13C5,15N; (S)-2-Carboxypyrrolidine-13C5,15N; (S)-2-Pyrrolidinecarboxylic Acid-13C5,15N; (S)-Proline-13C5,15N; 2-Pyrrolidinecarboxylic Acid-13C5,15N; L-(-)-Proline-13C5,15N; L-Pyrrolidine-2-carboxylic Acid-13C5,15N; L-α-Pyrrolidinecarboxylic Acid-13C5,15N; NSC 46703-13C5,15N; Proline-13C5,15N;

Structure:



Molecular Formula:

$^{13}\text{C}_5\text{H}_9^{15}\text{NO}_2$

Molecular weight:

121.09

Source of Product:

N/A

Solubility:

Water (Slightly)

Lot Number: 2024-TCO-010

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
C NMR	Conforms to Structure	Conforms
MS	Conforms to Structure	Conforms
Isotopic Purity	>95%	99.4%
HPLC Purity	Report Result	99.98% (ELSD)
Elemental Analysis	Conforms	%C: 49.62, %H: 7.47, %N: 11.66

Additional Information:

Normalized Intensity: 13C0 = 0.01%, 13C1 = 0.01%, 13C2 = 0.03%, 13C3 = 0.01%, 13C4 = 0.13%, 13C5 = 3.18%, 13C6 = 96.64%

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
swathi reddy	Toni Rantanen	Chanell Chu	2/7/2024	2/5/2028
