



CERTIFICATE OF ANALYSIS

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1. Identification

CAS Number:

N/A

Catalogue Number:

TRC-C982202

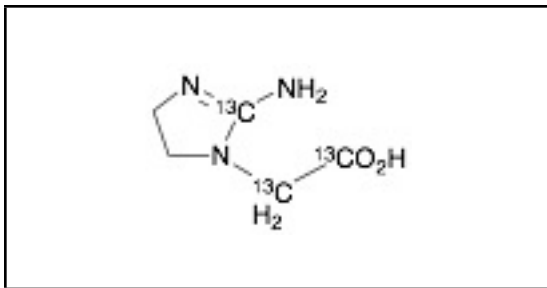
Product:

Cyclocreatine-1,4,5- $^{13}\text{C}_3$

Synonyms:

2-Amino-4,5-dihydro-1H-Imidazole-1-acetic Acid- $^{13}\text{C}_3$; 1-Carboxymethyl-2-iminoimidazolidine- $^{13}\text{C}_3$

Structure:



Molecular Formula:

$\text{C}_2^{13}\text{C}_3\text{H}_6\text{N}_3\text{O}_2$

Molecular Weight:

146.12

Source of Product:

Synthetic

2. Analytical Information

Lot Number:

14-PSB-9-1

Atmosphere:

Air

Melting Point:

>268°C (dec.)

Solubility

Water (Slightly)

Appearance of Product:

White Solid

Stability

Not Determined

Method for Determining Identity:

^1H NMR (D_2O), ^{13}C NMR (D_2O), and MS

Long Term Storage Condition:

-20°C

Purity:

Chemical Purity: 98%

Isotopic Purity: 99.6%

Shipping Condition

This Product Is Stable To Be Shipped At Room Temperature

Additional Information:

TLC Conditions: C_{18} ; Methanol : Water : Acetic Acid = 9 : 1 : 0.1; Visualized with KMnO_4 ; R_f = 0.60.

^1H NMR, ^{13}C NMR, and MS conform to structure

Normalized Intensity: $^{13}\text{C}_0$ = 0.00%, $^{13}\text{C}_1$ = 0.00%, $^{13}\text{C}_2$ = 1.29%, $^{13}\text{C}_3$ = 98.71%

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.

Philip Chan, Head of Quality Assurance

QC Test Date

January 8, 2018

Retest Date

January 6, 2022