



CERTIFICATE OF ANALYSIS

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1. Identification

CAS Number:

1189471-66-6

Catalogue Number:

TRC-L468752

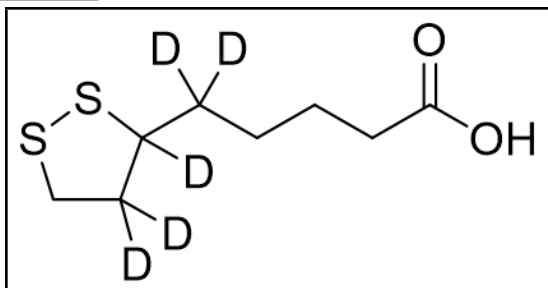
Product:

rac α -Lipoic Acid-d₅

Synonyms:

(+/-)-1,2-Dithiolane-3-pentanoic Acid-d₅; (+/-)-1,2-Dithiolane-3-valeric Acid-d₅; (+/-)-Thioctic Acid-d₅; (RS)- α -Lipoic Acid-d₅; DL-Thioctic Acid-d₅; Liposan-d₅; Lipothion-d₅; NSC 628502-d₅; NSC 90788-d₅; Protogen A-d₅; Thioctsan-d₅; Thioctacid-d₅;

Structure:



Molecular Formula:

C₈H₉D₅O₂S₂

Molecular Weight:

211.36

Source of Product:

Synthetic

2. Analytical Information

Lot Number:

10-PTR-125-1

Atmosphere:

Inert Gas

Melting Point:

56.0 - 57.0°C

Solubility

Chloroform, Methanol

Appearance of Product:

Pale Yellow Solid

Stability

Hygroscopic

Method for Determining Identity:

¹H NMR (CDCl₃) and MS

Long Term Storage Condition:

-20°C, Inert atmosphere, Light sensitive

Purity:

Chemical Purity: 95%

Isotopic Purity: 98.6%

Shipping Condition

This Product Is Stable To Be Shipped At Room Temperature

Additional Information:

TLC Conditions: SiO₂; Hexane : Ethyl Acetate = 6 : 4; Visualized with UV and AMCS; Single Spot, R_f = 0.4.

¹H NMR and MS conform to structure.

Elemental Analysis: (Found) %C: 45.36, %H: 6.57; (Calculated) %C: 45.46, %H: 6.68

Normalized Intensity: d₀ = 0.01%, d₁ = 0.00%, d₂ = 0.00%, d₃ = 0.00%, d₄ = 7.11%, d₅ = 92.88

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

July 2, 2014

Retest Date

June 29, 2021