



CERTIFICATE OF ANALYSIS

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1. Identification

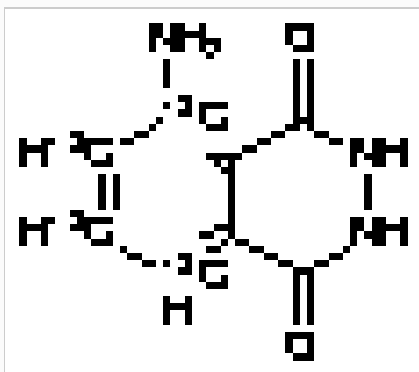
Catalogue Number: L474452

CAS Number: 1189931-96-1

Product: Luminol-13C4

Synonym: 5-Amino-2,3-dihydro-1,4-phthalazinedione-13C4; 3-Aminophthalhydrazide-13C4; 3-Aminophthalic Acid Hydrazide-13C4; 3-Aminophthalic Hydrazide-13C4; 5-Amino-1,4-dihydroxyphthalazine-13C4; 5-Amino-2,3-dihydro-1,4-

Structure:



Molecular Formula:

$C_4^{13}C_4H_7N_3O_2$

Molecular weight:

181.13

Source of Product:

Synthetic

Solubility:

DMSO (Slightly), Methanol (Slightly)

Lot Number: 8-VCP-9-1

Purity: 98%

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

Storage Condition: 4°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	Pale Yellow to Light Yellow Solid	Pale Yellow Solid
NMR	Conforms to Structure	Conforms
MS	Conforms to Structure	Conforms
HPLC Purity	Report Result	99.90% (220 nm)
C NMR	Conforms to Structure	Conforms
Isotopic Purity	>95%	99.1%

Additional Information:

Normalized Intensity: 13C0 = 0.03%, 13C1 = 0.06%, 13C2 = 0.10%, 13C3 = 3.17%, 13C4 = 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
Henry Tieu	Toni Rantanen	Chanell Chu	3/13/2024	3/11/2028