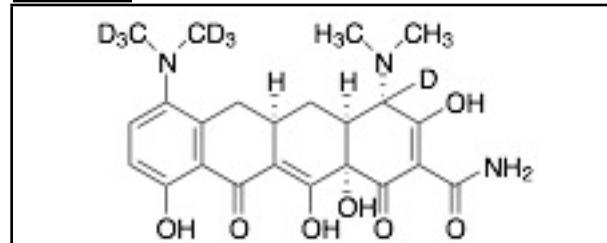


CERTIFICATE OF ANALYSIS**1. Identification**

Catalogue Number M344798 Lot Number 24-AKS-87-2

Product Name
Minocycline-d7 (Major)

StructureSynonyms

(4S,4aS,5aR,12aS)-4-(Dimethylamino)-7-[di(methyl-d3)amino]-1,4,4a,5,5a,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-2-naphthacencarboxamide-d7

CAS Number

N/A Solubility Methanol (Slightly), Water (Slightly)

Shipping Condition

This Product Is Stable To Be Shipped At Room Temperature

Molecular Formula

C₂₃H₂₀D₇N₃O₇ Source of Product Synthetic

Long Term Storage Conditions

-20°C, Inert atmosphere, Light sensitive

Molecular Weight

464.52 Purity >95%

2. Warnings

Light Sensitive

3. Analytical Information

| <u>Tests</u> | <u>Specifications</u> | <u>Results</u> |
|--------------------|-----------------------------------|-------------------------------|
| Appearance | Light Yellow to Dark Orange Solid | Yellow to Dark Yellow Solid |
| NMR | Conforms to Structure | Conforms |
| Elemental Analysis | Conforms | %C: 57.70, %H: 5.70, %N: 8.80 |
| HPLC Purity | >95% | 96.55% (220 nm) |
| MS | Conforms to Structure | Conforms |
| Specific Rotation | Report Result | -41.7° (c = 0.1, DMSO) |

Additional Information

Normalized Intensity: d₀ = 0.00%, d₁ = 0.04%, d₂ = 0.06%, d₃ = 0.03%, d₄ = 0.56%, d₅ = 7.42%, d₆ = 45.40%, d₇ = 46.50%

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

| <u>Reviewed by</u> | <u>Reviewed by</u> | <u>C of A Approved by</u> | <u>Test Date</u> | <u>Retest Date</u> |
|--------------------|--------------------|---------------------------|------------------|--------------------|
| | | | 6/13/2023 | 6/11/2027 |

Henry Tieu
Product Quality Specialist

Toni Rantanen
Manager, Quality Assurance

Chanell Chu
Jr. Quality Assurance