



## CERTIFICATE OF ANALYSIS

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### 1. Identification

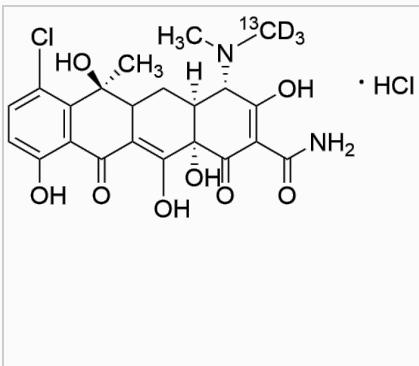
**Catalogue Number:** C426504

**CAS Number:** NA

**Product:** Chlortetracycline-13C-d3  
Hydrochloride (Technical Grade)

**Synonym:** (4S,4aS,5aS,6S,12aS)-7-Chloro-4-(dimethylamino-d6)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxamide-13C-d3  
Hydrochloride; 7-Chlortetracycline-13C-d3  
Hydrochloride; 7-Chlorotetracycline-13C-d3  
Monohydrochloride; Aureomycin-13C-d3  
Hydrochloride; Biomycin-13C-d3  
Hydrochloride; Chlortetracycline-13C-d3  
Hydrochloride; Fermycin-13C-d3 Soluble;  
Ispahamycin-13C-d3;

**Structure:**



**Molecular Formula:**

$C_{21}^{13}CH_{20}D_3ClN_2O_8.HCl$

**Molecular weight:**

519.35

**Source of Product:**

Synthetic

**Solubility:**

DMSO (Very Slightly),  
Methanol (Slightly)

**Lot Number:** 10-WJS-103-1

**Purity:** Technical Grade

**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

<b>Tests:</b>	<b>Specifications:</b>	<b>Results:</b>
Appearance	Pale Yellow to Dark Yellow Solid	Yellow to Dark Yellow Solid
NMR	Conforms to Structure	Conforms
MS	Conforms to Structure	Conforms
Isotopic Purity	>95%	97.7%

**Additional Information:** Normalized Intensity: d0 = 0.48%, d1 = 2.41%, d2 = 0.00%, d3 = 0.00%, d4 = 97.11%

**Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 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
Meenakshi Sharma	Toni Rantanen	Chanell Chu	11/29/2023	11/27/2027
				