



CERTIFICATE OF ANALYSIS

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1. Identification

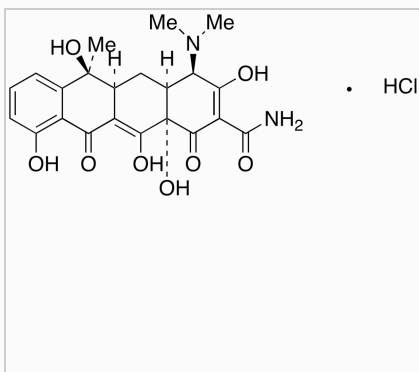
Catalogue Number: T291405

CAS Number: 23313-80-6

Synonym: (4R,4aS,5aS,6S,12aS)-4-(Dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxamide Hydrochloride; Quatrimycin Hydrochloride; [4R-(4 α ,4 α β ,5 α β ,6 α ,12 α β)]-4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-3,6,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-2-naphthacenecarboxamide Hydrochloride; 4-Epitetracycline Hydrochloride;

Product: 4-epi-Tetracycline Hydrochloride

Structure:



Molecular Formula:

$C_{22}H_{24}N_2O_8 \cdot HCl$

Molecular weight:

444.44+ (36.46)

Source of Product:

N/A

Solubility:

DMSO (Slightly), Methanol (Slightly), Water (Slightly)

Lot Number: 3-HAB-2-1

Purity: 97%

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

Tests:	Specifications:	Results:
Appearance	Pale Yellow to Very Dark Yellow Solid	Yellow to Dark Yellow Solid
NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 53.76, %H: 5.40, %N: 5.73
HPLC Purity	Report Result	99.43% (365 nm)
MS	Conforms to Structure	Conforms
Chloride Content	Report Result	6.66% by Ion Chromatography
Specific Rotation	Report Result	-339.3° (c = 0.1, Methanol)
Water Content	Report Result	~2.2% based on Elemental Analysis

Additional Information: N/A

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
Meenakshi Sharma	Toni Rantanen	Chanell Chu	1/17/2022	1/15/2026
				