

CERTIFICATE OF ANALYSIS

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1. Identification

Catalogue T291405 CAS 23313-80-6 Number: Number:

> 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;

 $[4R-(4a,4a\beta,5a\beta,6a,12a\beta)]-4-$

(dimethylamino)-1,4,4a,5,5a,6,11,12aoctahydro-3,6,10,12,12a-pentahydroxy-6-

methyl-1,11-dioxo-2-

naphthacenecarboxamide Hydrochloride; 4-

Epitetracycline Hydrochloride;

Structure:

Product: 4-epi-Tetracycline Hydrochloride

Molecular Formula:

C22H24N2O8 • HCl

Molecular weight:

444.44+ (36.46)

Source of Product:

N/A

Solubility:

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

Lot

2023-GHZ-182 Number:

Purity: 96%

This Product Is Stable To Be **Shipping** Condition: 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 Very Dark Yellow Solid

NMR Conforms to Structure Conforms

96.89% (260 nm) **HPLC Purity** Report Result

Conforms to Structure MS Conforms

Specific Rotation Report Result -302.0° (c = 0.1, Methanol)

Chloride Content Report Result 7.4%

Elemental Analysis Conforms %C: 52.70, %H: 5.46, %N: 5.06

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 ± 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 Toni Rantanen

C of A Approved By Chanell Chu

Test Date

Retest Date

Nicole Yip

5/18/2023

5/16/2027