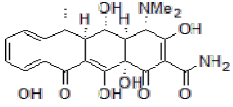


# Certificate of Analysis



Product Identification		Chemical Structure
Catalog number	HB4608	 <p>0.5 x CH<sub>3</sub>CH<sub>2</sub>OH HCl 0.5 x H<sub>2</sub>O</p>
Compound name	Doxycycline hyclate	
Chemical name	(4S,4aR,5S,5aR,6R,12aS)-4-(Dimethylamino)-3,5,10,12,12a-pentahydroxy-6-methyl-1,11-dioxo-1,4,4a,5,5a,6,11,12a-octahydrotetracene-2-carboxamide hydrochloride hemiethanolate	
Batch number	E0718-1-1	
Batch molecular formula	C <sub>22</sub> H <sub>24</sub> N <sub>2</sub> O <sub>8</sub> ·HCl·0.5H <sub>2</sub> O·0.5C <sub>2</sub> H <sub>6</sub> O	
Batch molecular weight	512.94	
Method	QC requirement	QC Result
HPLC	Reverse Phase HPLC shows >94% purity	Meets specification: 95.8%
NMR	<sup>1</sup> H NMR in D <sub>2</sub> O at 400 MHz consistent with structure	Meets specification
Mass spectrum	Electrospray positive analysis consistent with structure	Meets specification
Microanalysis	Elemental analysis is within 0.4% for the batch molecular formula	Meets specification
TLC	TLC analysis in 50% PAW/BuOH shows one spot under KMnO <sub>4</sub>	Meets specification: R <sub>f</sub> =0.4
Physical appearance	Yellow to pale yellow solid	Meets specification: Yellow solid
Solubility	Soluble in water (100 mM) and in DMSO (100 mM)	Meets specification

Produced by

Signature

Passed by

Signature

Date

12-06-18

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.