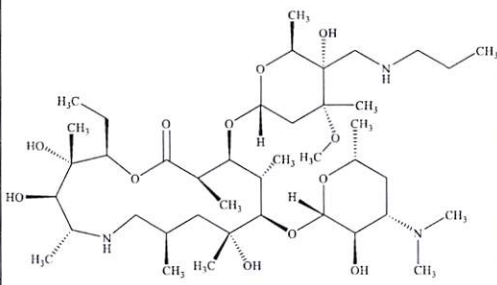


Certificate of Analysis



Certificate No.: **20250303514**

Date: March 3, 2025

Retest date: February 27, 2028

Compound Name:	Tulathromycin A	
Synonyms:	(2R,3S,4R,5R,8R,10R,11R,12S,13S,14R)-11-(((2S,3R,4S,6R)-4-(dimethylamino)-3-hydroxy-6-methyltetrahydro-2H-pyran-2-yl)oxy)-2-ethyl-3,4,10-trihydroxy-13-(((2R,4R,5S,6S)-5-hydroxy-4-methoxy-4,6-dimethyl-5-((propylamino)methyl)tetrahydro-2H-pyran-2-yl)oxy)-3,5,8,10,12,14-hexamethyl-1-oxa-6-azacyclopentadecan-15-one	
TLC Catalogue Number:	T-153001	
CAS Number:	217500-96-4	
Alternate CAS Number:	N/A	
Molecular Weight:	806.09	
Molecular Formula:	C ₄₁ H ₇₉ N ₃ O ₁₂	
Source:	TLC Pharmaceutical Standards	
Source Lot No.:	5465-011A1	
Storage Conditions:	Store at 2-8 °C	
Solubility:	DMSO, Acetonitrile	

Test Description	Specifications	Results
Visual Description	White to off-white solid	Conforms
Identification		
IR	Conforms to structure	Conforms
MS	Conforms to structure	Conforms
¹ H NMR	Conforms to structure	Conforms
Purity (HPLC)	Not less than 95.0%	100.0%
Impurity (HPLC)	N/A	
Water Content (KF)	N/A	0.3%
Residue (TGA at 800 °C)	N/A	0.3%
Residual Solvents (NMR)	No residual solvent	
Assay (%)	Not less than 90.0%	99.4%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		03/03/2025
Approved by:	Quality Assurance		03/03/2025

Attachments: Peak Attribution Table, HPLC, IR, MS, NMR and TGA spectra.