

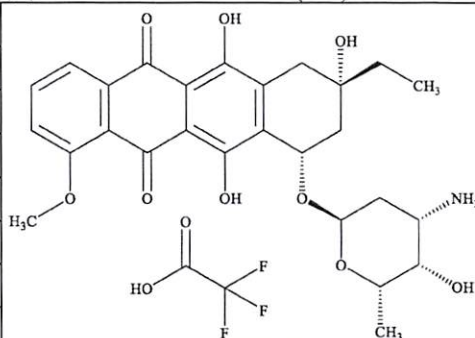
Certificate of Analysis

Certificate No.: 20250313012



Date: March 13, 2025

Retest date: March 7, 2028

Compound Name: Daunorubicin EP Impurity G Trifluoroacetate (13-Deoxydaunorubicin Trifluoroacetate)	
Synonyms:	(8S,10S)-10-(((2R,4S,5S,6S)-4-amino-5-hydroxy-6-methyltetrahydro-2H-pyran-2-yl)oxy)-8-ethyl-6,8,11-trihydroxy-1-methoxy-7,8,9,10-tetrahydrotetracene-5,12-dione, 2,2,2-trifluoroacetic acid (1:1)
TLC Catalogue Number:	D-4827
CAS Number:	N/A
Alternate CAS Number:	79466-09-4 (free base)
Molecular Weight:	513.54 114.02
Molecular Formula:	C ₂₇ H ₃₁ NO ₉ . C ₂ HF ₃ O ₂
Source:	TLC Pharmaceutical Standards
Source Lot No.:	6687-048A6
Storage Conditions:	Store at 2-8 °C
Solubility:	Methanol, DMSO



Test Description	Specifications	Results
Visual Description	Red solid	Conforms
Identification		
IR	Conforms to structure	Conforms
MS	Conforms to structure	Conforms
¹ H NMR	Conforms to structure	Conforms
¹⁹ F NMR	Conforms to structure	Conforms
Purity (HPLC)	Not less than 95.0%	99.2%
Impurity (HPLC)	RT 5.27, 0.15%; RT 6.56, 0.28%; RT 8.11, 0.27%	
Water Content (KF)	N/A	2.4%
Residual Solvents (NMR)	No residual solvent	
Assay (qNMR)	Not less than 85.0%	87.7%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		03/13/2025
Approved by:	Quality Assurance		03/13/2025

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