

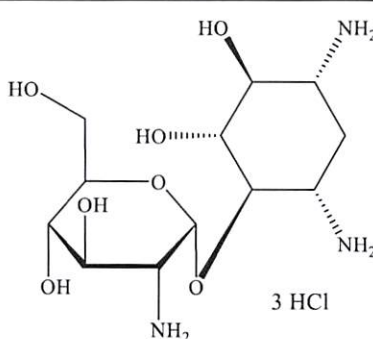
Certificate of Analysis

Certificate No.: **20250424503**


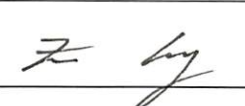
Date: April 24, 2025

Retest date: April 21, 2028

Compound Name: Neomycin Sulfate EP Impurity D TriHCl (Paromamine TriHCl)	
Synonyms:	4-O-(2-amino-2-deoxy- α -D-glucopyranosyl)-2-deoxy-D-streptamine, hydrochloride (1:3)
TLC Catalogue Number:	N-080020
CAS Number:	18685-97-7
Alternate CAS Number:	534-47-4 (free base)
Molecular Weight:	323.35 3*36.46
Molecular Formula:	C ₁₂ H ₂₅ N ₃ O ₇ · 3 HCl
Source:	TLC Pharmaceutical Standards
Source Lot No.:	2396-012A1
Storage Conditions:	Store at 2-8 °C
Solubility:	DMSO (heated), Water



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
Elemental Analysis	Conforms to structure	Conforms
Purity (HPLC)	Not less than 95.0%	99.9%
Impurity (HPLC)	N/A	
Water Content (KF)	N/A	5.3%
Optical Rotation	N/A	$[\alpha]_D^{24.0}$ (c=0.63, H ₂ O): +76.2°
Residual Solvents (NMR)	0.8% methanol and 0.3% ethanol	
Assay (%)	Not less than 90.0%	93.5%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		04/24/2025
Approved by:	Quality Assurance		04/24/2025

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