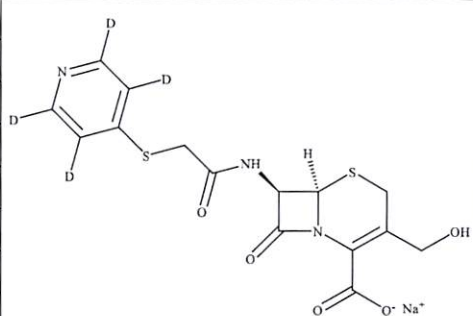


Certificate of Analysis



Certificate No.: 20260618004

Date: June 18, 2026

Retest date: June 15, 2029

Compound Name:	Desacetyl Cephapirin-d₄ Sodium Salt	
Synonyms:	(6R,7R)-3-(hydroxymethyl)-8-oxo-7-(2-((pyridin-4-yl-d ₄)thio)acetamido)-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylate, sodium salt (1:1)	
TLC Catalogue Number:	C-182010	
CAS Number:	N/A	
Alternate CAS Number:	104557-24-6 (non-labelled)	
Molecular Weight:	384.44 22.99	
Molecular Formula:	C ₁₅ H ₁₀ D ₄ N ₃ O ₅ S ₂ . Na	
Source:	TLC Pharmaceutical Standards	
Source Lot No.:	7497-018A3	
Storage Conditions:	Store at 2-8 °C	
Solubility:	DMSO, Water	

Test Description	Specifications	Results
Visual Description	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%	99.3%
Impurity (HPLC)	RT 1.45, 0.11%; RT 4.67, 0.21%; RT 16.91, 0.16%	
Isotopic Enrichment	Not less than 98.0%	99.6%
Optical Rotation	N/A	$[\alpha]_D^{25.0}(c=0.49, H_2O): +164.3^\circ$
Residual Solvents (NMR)	No residual solvent	
Assay (qNMR)	Not less than 90.0%	91.6%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		06/18/2026
Approved by:	Quality Assurance		06/18/2026

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