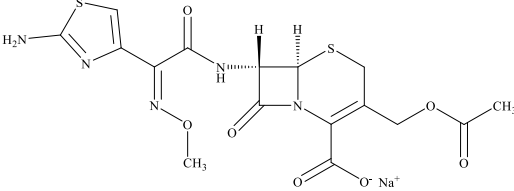


Certificate of Analysis

Certificate No.: 20200812006

Date: August 12, 2020

Retest date: July 27, 2023

Compound Name:	Cefotaxime Impurity 9 Sodium Salt	
Synonyms:	(6R,7S)-3-(acetoxymethyl)-7-((Z)-2-(2-aminothiazol-4-yl)-2-(methoxyimino)acetamido)-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, sodium salt (1:1)	
TLC Catalogue Number:	C-106023	
CAS Number:	152186-43-1 (free acid)	
Molecular Weight:	454.45 22.99	
Molecular Formula:	C ₁₆ H ₁₆ N ₅ O ₇ S ₂ . Na	
Source:	TLC Pharmaceutical Standards	
Source Lot No.:	3919-044A10	
Storage Conditions:	Store at 2-8 °C	
Solubility:	Methanol, DMSO	

Test Description	Specifications	Results
Visual Description	Pale brown solid	Conforms
Identification		
IR	Conforms to structure	Conforms
MS	Conforms to structure	Conforms
¹H NMR	Conforms to structure	Conforms
Purity (HPLC)	Not less than 90.0%	95.1%
Impurity (HPLC)	RT 5.85, 1.17%; RT 7.18, 0.73%; RT 17.39, 1.06%	
Water Content (KF)	N/A	2.5%
Optical Rotation	N/A	$[\alpha]_D^{25.0}(c=0.32, \text{DMSO}): +107.3^\circ$
Residual Solvents (NMR)	No residual solvent	
Assay (%)	Not less than 85.0%	92.7%
Recommendation:	Released.	

Name	Department	Signature	Date
Reviewed and approved by:	Analytical Services		
Approved by:	Quality Assurance		

Attachments: HPLC, IR, MS and NMR spectra.