

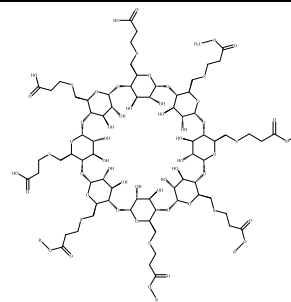
Certificate of Analysis

Certificate No.: 20200814009

Date: August 14, 2020

Retest date: August 4, 2023

Compound Name: Sugammadex Impurity 65 (Mixture of Isomers)	
TLC Catalogue Number:	S-082068
CAS Number:	N/A
Molecular Weight:	2030.17
Molecular Formula:	C ₇₄ H ₁₁₆ O ₄₈ S ₈
Source:	TLC Pharmaceutical Standards
Source Lot No.:	3974-003A5
Storage Conditions:	Store at 2-8 °C
Solubility:	DMSO, DMF, solution of Methanol and Water, Alkaline solution



Test Description	Specifications	Results
Visual Description	White to off-white solid	Conforms
Identification		
IR	Conforms to structure	Conforms
MS	Conforms to structure	Conforms
¹H NMR	Conforms to structure	Conforms
Elemental Analysis	Conforms to structure	Conforms
Purity (HPLC)	Not less than 95.0%	98.6%
Impurity (HPLC)	RT 6.67, 1.40%	
Residual Solvents (NMR)	No residual solvent	
Assay (qNMR)	Not less than 90.0%	91.5%
Recommendation:	Released. The compound contains 1.4% Sugammadex Impurity 52 (RT 6.67, TLC No. S-082057) according to its HPLC and LC-MS.	

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

Attachments: HPLC, IR, MS and NMR spectra.