

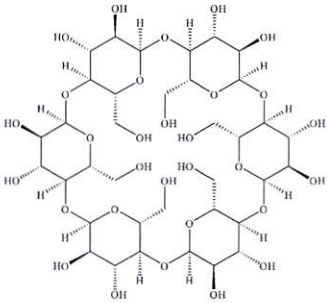
Certificate of Analysis

Certificate No.: **20220927003**


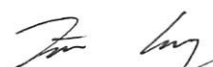
Date: September 27, 2022

Retest date: September 26, 2025

Compound Name: Sugammadex Impurity 62 (<i>alpha</i> -Cyclodextrin)	
Synonyms:	Stereoisomer of 5,10,15,20,25,30-hexakis(hydroxymethyl)-2,4,7,9,12,14,17,19,22,24,27,29-dodecaoxaheptacyclo[26.2.2.2 ^{3,6} .2 ^{8,11} .2 ^{13,16} .2 ^{18,21} .2 ^{23,26}]dotetracontane-31,32,33,34,35,36,37,38,39,40,41,42-dodecol
TLC Catalogue Number:	S-082005
CAS Number:	10016-20-3
Molecular Weight:	972.85
Molecular Formula:	C ₃₆ H ₆₀ O ₃₀
Source:	TLC Pharmaceutical Standards
Source Lot No.:	3897-012A3
Storage Conditions:	Store at 2-8 °C
Solubility:	DMSO, Water, DMF



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%	100.0%
Impurity (HPLC)	N/A	
Residual Solvents (NMR)	0.3% methanol and 0.1% dichloromethane	
Assay (qNMR)	Not less than 85.0%	91.3%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		09/28/2022
Approved by:	Quality Assurance		09/28/2022

Attachments: HPLC, IR, MS and NMR spectra.