



Certificate of Analysis

Axon Catalogue ID:	3453	Batch Number:	1	
Product Name:	Colistin sulfate			
Alternative Name(s):	Polymixin E sulfate			
IUPAC Name:	(S)-N-((S)-4-Amino-1-((2S,3R)-1-((S)-4-amino-1-oxo-1-((3R,6S,9S,12S,15R,18S,21S)-6,9,18-tris(2-aminoethyl)-3-((S)-1-hydroxyethyl)-12,15-diisobutyl-2,5,8,11,14,17,20-heptaaxo-1,4,7,10,13,16,19-heptaazacyclotricosan-21-ylamino)butan-2-ylamino)-3-hydroxy-1-oxobutan-2-ylamino)-1-oxobutan-2-yl)-5-methylheptanamide sulfate			
Structure:			Amount:	
CAS number(s):	1066-17-7 (parent), 1264-72-8 (sulfate (1:1))			
Molecular Formula:	C52H98N16O13.H2SO4	Molecular Weight:	1253.51	
Batch Molecular Formula:	C52H98N16O13.3H2SO4.6H2O	Batch Molecular Weight:	1557.76	
Appearance:	White solid	Observed mp:	>239 °C (decomp)	
TLC (R_f):	0.14	nBuOH/AcOH/H2O (7:1:1)		
Chemical Purity:	>98%			
Optical Purity (ee):	Optically pure			
¹H-NMR:	Analytical data confirm chemical structure			
Mass Spec:	Analytical data confirm chemical structure			
Microanalysis:	Calculated: C 40.09, H 7.51, N 14.39; Found: C 40.04, H 7.46, N 14.32			
Storage Conditions:	Desiccate at -20 °C			
Solubility Data:	Solvent	Solubility (mg/ml)	Solubility (mM)	Remarks
	Water	6.6	4.2	
	0.1N NaOH (aq)			Not Tested
	0.1N HCl (aq)			Not Tested
	DMSO	0.0	0.0	Insoluble
	EtOH	0.0	0.0	Insoluble
Remarks:	Purity based on NMR. The material was found to be the triplesulfate.			
QC Date:	19-8-2021			

The purity of Axon Ligands is confirmed by HPLC, MS, NMR and/or microanalysis. Analytical data are available upon request. Request can be submitted by e-mail to info@axonmedchem.com indicating Catalogue ID and Batch number.

Caution: Not fully tested. For research purposes only