

## **Certificate of Analysis**

Product Name	Keratan sulfate, sodium salt (from Bovine cornea)	Batch No.	M22X04309
CAS No.	9056-36-4	MFG. Date	Apr 30, 2022
CAT No.	R036999	Retest Date	Apr, 2025
Items	Specification	Results	
Appearance	White to off-white solid	Conforms	
NMR	Conforms to structure	Conforms	
Hexose level (Anthrone colorimetric assay)	35 ± 5 (% w/w)	34.8 ± 1.4%	
Hexosamine level (Hexosamine assay)	40 ± 10 (% w/w)	42.6 ± 2.2%	
Uronic acid level (Total uronic acid colorimetric assay)	≤ 2 (% w/w)	0.7 ± 0.1%	
Free sulfate analysis (HPLC-CAD)	≤ 1(% w/w)	< 0.4%	
Potency (HPLC-SEC-RI)	≥ 90% calculated from purities	97.9%	
Purity			
i) HPLC-SEC-RI TSK 4000 +TSK 3000 in series	≥ 90% as a single broad RI signal eluting with RI maximum at 14 ±1 mL	Complies	
ii) Small oligosaccharides by HPLC-SEC-RI (2 x Superdex peptide columns)	≤ 5% area RI detected peaks between 20 - 34 mL	No peaks detected	
iii) Protein content (Bradford assay)	≤ 2 (% w/w)	0.2 ± 0.3%	
iv) Inorganic salts by HPLC SEC-RI (2 x Superdex peptide columns)	≤ 5(% w/w)	1.9%	
Conclusion	Corresponds.		
Storage Condition	Refrigerator.		

Alex Foster

QA:

Felix Hobart