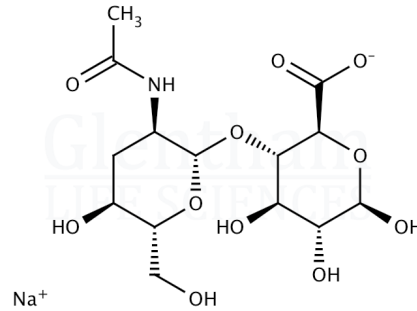


Certificate of Analysis

Product Name	Hyaluronic acid sodium salt, m.w. 1.0MDa, Ph. Eur. grade, low endotoxin
Glentham Code	GE4047
CAS Number	9067-32-7
Batch Number	281AKG
Molecular Weight	1,000,000
Molecular Formula	(C ₁₄ H ₂₀ NNaO ₁₁) _n
Storage Temp.	-20°C



Property	Specification	Batch 281AKG
Physical Description	White to almost white powder, hygroscopic	Conforms
Identification	A, B according to Ph. Eur.	Conforms
Appearance of Solution	A600nm: ≤ 0.01	Conforms
pH (5% in water)	5.0 - 8.5	5.7
Intrinsic Viscosity	To pass Ph. Eur. test	Conforms
Nucleic Acids	A260nm: ≤ 0.5	Conforms
Protein	≤ 0.05%	0.03%
Chlorides	≤ 0.5%	Conforms
Iron (Fe)	≤ 80ppm	≤ 80ppm
Heavy Metals	≤ 10ppm	≤ 10ppm
Arsenic (As)	≤ 2ppm	≤ 2ppm
Residue on Ignition	≤ 20.0%	17.0%
Bacteria Count	≤ 100CFU/g	≤ 10CFU/g
Yeast and Mould	≤ 10CFU/g	≤ 10CFU/g
Staphylococcus aureus	Negative	Negative
Pseudomonas aeruginosa	Negative	Negative
Hemolysis	Negative	Negative
Hemolytical Streptococci	Negative	Negative
Endotoxins	≤ 0.01EU/mg	Conforms
Loss on Drying	≤ 10.0%	5.1%
Glucuronic acid	≥ 46.0%	46.2%
Average Molecular Weight	1.0 - 1.5 MDa	1.02 MDa
Assay	95.0 - 105.0 % (dried basis)	96.0%
Pharmacopoeia Specification(s)	Ph. Eur.	Conforms to Ph. Eur.

Specification Version	v1.0
Manufacture Date	2023-05-01
Re-Test Date	2027-10-15

Certificate of Analysis

Glenthams Life Sciences confirm that the above referenced product conformed to the information displayed in this document on the quality release date. Please check www.glenthams.com or contact us using the details above for the current version of this document.

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