

## Certificate of Analysis

Date of Testing: 2024-01-22 12:14:39  
Date of Next Testing: 2027-01-21 12:14:39  
Product Name: **Hyaluronic acid (HA-THM)**  
CAS Number: 9067-32-7  
Specifications & Purity: molecular weight  $\geq 1.8$ MDa  
Lot #: A2419396  
SKU #: **H293496**  
Version: **1**  
Analysis #: **313434**  
Storage Temperature: Store at -20°C, Argon charged

Parameter	Limit Values	Result
PH (0.10g/100ml water)	6.0-7.5	6.60000
Molecular Weight	$\geq 1800000$ (Da)	21200000.00 Da
intrinsic viscosity	$\geq 27.2$ (DL/G)	31.00000 DL/G
Protein	<0.05 (%)	0.02700 %
Heavy metals	<20 (ppm)	12.30 ppm
Glucuronic acid	> 46 (%)	46.90 %
Sodium hyaluronate	> 95 (%)	96.70000 %
Transmittance (0.5% in water)	> 99 (%)	99.90000 %
loss on drying(110°C,15min)	<15 (%)	7.70000 %
Appearance (H293496)	white to off white powder or Granule	white to off white powder or Granule
Infrared spectrum	Conforms to Structure	Conforms to Structure
Response to the tests for Sodium (ICP)	conforms	Conforms
Microbial Detection	Pass	Pass



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QA & QC Manager