



Certificate of Analysis

Name	Hyaluronic Acid	Grade	Food Grade
M.W.	7-10 KDa	Test Method	GB/T 4576-2013
Lot No.	20210523F1	Report Date	2021/05/24
MFG Date	2021/05/23	EXP Date	2023/05/22

	Test Items	Specification	Results
1	Appearance	White or almost white powder or granules	Complies
2	Infrared absorption	Positive	Complies
3	Reaction of sodium	Positive	Complies
4	Bulk Density	$\geq 0.2\text{g/cm}^3$	0.39g/cm^3
5	Transparency	$\geq 99.0\%$	99.7%
6	Ph	5.0~8.0	5.4
7	Intrinsic viscosity	$\leq 0.47\text{dL/g}$	0.41dL/g
8	Molecular weight	3-10 KDa	8254Da
9	Kinematic viscosity	Actual value	$1.16\text{mm}^2/\text{s}$
10	Mesh	≥ 60	Complies

Purity Test

11	Loss on drying	$\leq 10\%$	5.01%
12	Residue on ignition	$\leq 20\%$	18.96%
13	Heavy metals	$\leq 20\text{ppm}$	<20ppm
14	Arsenic	$\leq 2\text{ppm}$	<2ppm
15	Protein	$\leq 0.1\%$	0.04%
16	Assay	$\geq 95.0\%$	96.7%
17	Glucuronic acid	$\geq 46.0\%$	46.8%

Microbiological Test

18	Total bacterial count	$\leq 100\text{CFU/g}$	<10CFU/g
19	Yeasts & mold	$\leq 20\text{CFU/g}$	<10CFU/g
20	E. coli	Negative	Negative
21	Staph	Negative	Negative
22	Pseudomonas aeruginosa	Negative	Negative
23	Salmonella	Negative	Negative



ACROSS BIOTECH
MAKE A DIFFERENCE

Conclusion: The results meet the requirements of the specifications.