



Certificate Of Analysis (Proteoglycan)

Labeling Name	Salmon Nasal Cartilage Extract or Salmon Nasal Cartilage Extract (Contains Undenatured Type II Collagen, Undenatured Proteoglycan)
Raw Material	Salmon Nasal Cartilage
Origin	Hokkaido Japan
Use	Food ingredient
Expiry Date	2 years from manufacturing date if unopened. (Use promptly after opening)
Storage	Store in a cool and dark place, away from heat and moisture.
Contamination of the allergen	Salmon
Material categorized as additives	None
Carry over	None
Color	Because the raw material is 100% natural, there is some variations in color. In addition, it may contain a very small amount of black powder derived from the raw material, but there is no quality problem.

Test Items	Standard	Test method
Property	White to lemon yellow powder, slightly unique smell	Sensory evaluation
95% particle size	354 μm (Φ 0.21 mm × 45 mesh passed)	laser diffraction and scattering method
pH	7.0 to 8.0	pH meter measurement
Loss on drying	10.0 % or less	Weight loss test method
Residue on ignition	25.0 % or less	Ignition residue test method
Undenatured Type II Collagen	40.0 % or more	Amino acid automatic analysis (Dimethylamidobenzaldehyde colorimetric method)
Undenatured Proteoglycan	40.0 % or more	Differential scanning calorimetry HPLC method
Molecular weight (Undenatured Proteoglycan)	2,000 to 4,150 kDa	Absolute molecular weight method (SEC-MALS) *900 to 1,400 kDa by HPLC method
Lead	2.0 ppm or less	ICP-MS method
Mercury	0.5 ppm or less	ICP-MS method
Cadmium	0.3 ppm or less	ICP-MS method
Arsenic	2.0 ppm or less	ICP-MS method
Total Aerobic Microbial count	3,000 CFU/g or less	Standard agar medium
Coliforms	Absent	BGLB method
Total Yeast & Mold Count	100 CFU/g or less	Petrifilm (RYM plate)
Packaging form	Outer bag : aluminum , Inner bag : PE,PA Net content : 1kg or 100g (Sample shipment available separately)	
Note	[Extraction ratio] 5.0 - 8.0 % as Salmon Nasal Cartilage (Non-drying) Microorganism test is conducted by diluting 100 times. The definition of "Undenatured" for Undenatured proteoglycans has been clarified again. Proteoglycans with a molecular weight of 2,000 kDa or more must be confirmed by an absolute molecular weight measurement method (multi-angle light scattering detection). At present, there are no confirmed raw material products of proteoglycans exceeding 2,000 kDa in Japan, and the production of non-denatured proteoglycans of 2,000-4,150 kDa may infringe on our patent No. 6611968, a manufacturing method patent. Therefore, only our raw materials can claim to be non-denatured proteoglycans.	

* Please note that the contents may be changed without prior notice.