



Rhodamine B Isothiocyanate-Labeled Sodium Hyaluronate (H2)

(The average molecular weight: $1200 \times 10^3 - 1600 \times 10^3$)

Product Code (Outside Japan): CSR-RIHA-H2, CSR-RIHA-H2-1

Product Code (Japan): RIHA-H2, RIHA-H2-1

Labeled Content: 3 mg/vial (H2), 1 mg/vial (H2-1)

Appearance: red—purple amorphous block or powder (lyophilizate)

CAS number of Sodium Hyaluronate: 9067-32-7

Fluorescent Probe: Rhodamine B Isothiocyanate

CAS number of Fluorescent Probe: 944130-99-8

Overview: Hyaluronan (HA) is a glycosaminoglycan composed of repeating disaccharide units of N-acetyl-D-glucosamine (GlcNAc) and D-glucuronic acid (GlcUA). HA is abundant in synovial fluid, skin, the umbilical cord, and the vitreous body, where it exists as unbranched polysaccharide chains.

The Rhodamine B Isothiocyanate (RI)-Labeled Sodium Hyaluronate (RIHA) in this product is prepared by fluorescent labeling of amino-substituted HA with RI. RI molecules are covalently attached to amino groups that have been introduced into the carboxyl groups of the GlcUA residues in HA.

Each vial contains 1 mg (H2-1) or 3 mg (H2) of lyophilized RIHA. The excitation wavelength is 530–560 nm, and the emission wavelength is 570–600 nm. The average molecular weight is $1200 \times 10^3 - 1600 \times 10^3$. The attached Certificate of Analysis provides the actual measured values for each product specification.

Handling precautions:

- 1) The interior of the vial is depressurized. Please take care when opening the vial.
- 2) This product is hygroscopic. Store at -20°C or below, protected from moisture.
- 3) This product requires a considerable amount of time to dissolve completely. After adding the solvent, we recommend placing the vial in a refrigerator for an extended period (e.g., several tens of minutes) and then mixing thoroughly before use. When this product is dissolved at concentrations of approximately 5 mg/mL or higher, a homogeneous solution cannot be obtained using a conventional vortex mixer due to the high viscosity. To achieve a uniform solution, we recommend the following procedure: ①. Draw the solution into an appropriate injection syringe. ②. Connect a second syringe using a suitable connector tube. ③. Move the plungers back and forth alternately to mix the solution thoroughly.
- 4) After reconstitution, store the solution at -20°C or below, protected from light. Preparing aliquots suitable for anticipated use is recommended.
- 5) Protect the product from strong light during handling. Exposure to intense light may cause photobleaching of RIHA and will degrade it to a low-molecular form. The product may be used at room temperature if protected from strong light.
- 6) **The addition of water-miscible organic solvents to RIHA aqueous solutions may cause the release of fluorescent groups.** If the use of such solvents is unavoidable, keep the exposure as short as possible and at low temperature.
- 7) RIHA is degraded by oxidising agents, reducing agents, strong acids, strong alkalis and heat.
- 8) This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NOTICE: For R&D use only. Do not use for drug, household, cosmetically and others.

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