



## Unsaturated Chondro-Disaccharide: $\Delta$ Di-diSD

Code#: CSR-DDI-SD

Product Name: Unsaturated Chondro-Disaccharide:  $\Delta$ Di-diSD

Other Name: 2-acetamido-2-deoxy-3-O-(2-O-sulfo- $\beta$ -D-gluco-4-enepyranosyluronic acid)-6-O-sulfo-D-galactose

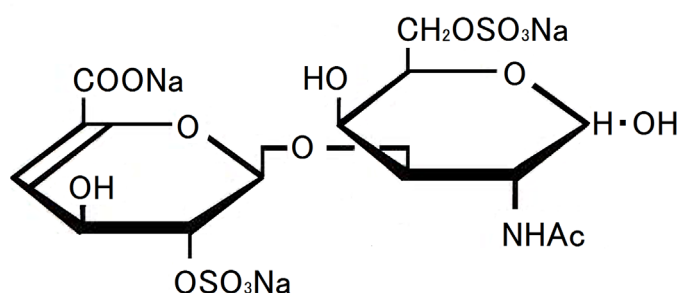
Labeled Amount: 500nmol/vial (lyophilized)

Molecular Formula of Sodium Salt: C<sub>14</sub>H<sub>18</sub>NNa<sub>3</sub>O<sub>17</sub>S<sub>2</sub>

Formula Weight of Sodium Salt: 605.3

Storage: below -20°C in the dark.

This product is made from chondroitin sulfate (CS) polymer by digestion with Chondroitinase ABC (CAS: 9024-13-9) or Chondroitinase AC-II (CAS: 9047-57-8), and purified by the column chromatography.  $\Delta$ Di-diSD has a double bond (unsaturated bond) between C-4 and C-5 position of uronic acid at the non-reducing end, and “ $\Delta$  (delta)” of  $\Delta$ Di-diSD means the unsaturated bond. The structure of  $\Delta$ Di-diSD sodium salt is shown in the chart below. This product is useful as a standard for a constituent analysis of CS and dermatan sulfate (DS) using a HPLC after the digestion with Chondroitinase derived from bacteria<sup>1)</sup>.  $\Delta$ Di-diSD is generated from the disaccharide unit with sulfuric acid ester on 6 position of galactosamine and on 2 position of uronic acid in CS or DS. The enclosed Certification of Analysis lists actual content and purity for product specifications.



Handling precautions:

1. Store protected from light at -20°C or below **avoiding humidity**.
2. Please **precipitate** the lyophilizate to the bottom of the vial by flash-centrifugation **before opening** of the vial.
3. We recommend freeze-preserving in aliquots appropriate for anticipated usage after dissolving with 0.5mL of an appropriate solvent. The vial capacity is for **0.5mL**.
4. Preservation stability varies with pH of the solution and is lower under alkaline conditions (**over pH 8**). **Note the pH** of the solvent when dissolving this product.
5. This product is not sterilized, please use filter (ex. 0.22  $\mu$  m) as you need.

Reference:

- 1) Yoshida K, et al.: Anal Biochem, **177**, 327 (1989)

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

[www.cosmobio.co.jp](http://www.cosmobio.co.jp), [www.cosmobioussa.com](http://www.cosmobioussa.com)

Jan. 28, 2022