



## Unsaturated Chondro-Disaccharide: $\Delta$ Di-4S

Code#: CSR-DDI-4S

Product Name: Unsaturated Chondro-Disaccharide:  $\Delta$ Di-4S

Other name: 2-acetamido-2-deoxy-3-O-( $\beta$ -D-gluco-4-ene-pyranosyluronic acid)-4-O-sulfo-D-galactose

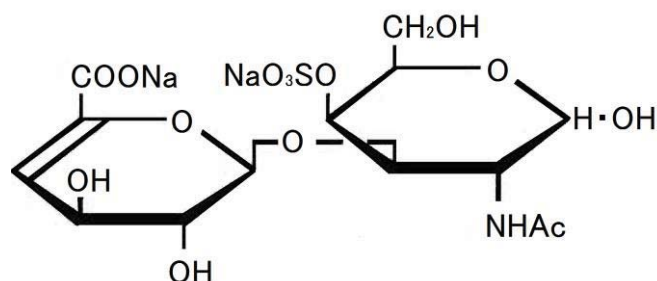
Content: 500nmol/vial (lyophilized)

Molecular Formula of Sodium Salt:  $C_{14}H_{19}NNa_2O_{14}S$

Formula Weight of Sodium Salt: 503.3

Storage: below  $-20^{\circ}C$  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-4S 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-4S means the unsaturated bond. The structure of  $\Delta$ Di-4S sodium salt is shown in the chart below. This product is useful as a standard for a constituent analysis of CS using a HPLC after the digestion with Chondroitinase derived from bacteria<sup>1)</sup>.  $\Delta$ Di-4S is generated from the "A structure" of CS or dermatan sulfate structure. The enclosed Certification of Analysis lists actual content and purity for product specifications.



### Handling precautions:

1. Store protected from light at  $-20^{\circ}C$  or below avoiding humidity. 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.
2. 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.
3. 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)



COSMO BIO Co., LTD.

TOYO EKIMAE BLDG. 2-20, TOYO 2-CHOME,  
KOTO-KU. TOKYO 135-0016, JAPAN  
TEL : (81)3-5632-9617  
FAX : (81)3-5632-9618  
e-mail : export@cosmobio.co.jp  
URL : www.cosmobio.com



www.cosmobio.com