COSMO BIO CO., LTD.
Inspiration for Life Science

Fluoresceinamine-Labeled Sodium Chondroitin Sulfate E (Squid Cartilage)

Product Code (Outside Japan): CSR-FACS-E2(SqC)1, CSR-FACS-E2(SqC)3
Product Code (Japan): FACS-E2(SqC)1, FACS-E2(SqC)3
Labeled Content: 1 mg/vial (FACS-E2(SqC)1), 3 mg/vial (FACS-E2(SqC)3)
Appearance: yellow－orange amorphous block or powder (lyophilizate)
Source of Sodium Chondroitin Sulfate E: Squid Cartilage
Fluorescent Probe: Fluoresceinamine
CAS number of Fluorescent Probe: 3326-34-9

Overview: Chondroitin sulfate (CS) is a sulfated glycosaminoglycan composed of repeating disaccharide units of N-acetyl-D-galactosamine (GalNAc) and D-glucuronic acid (GlcUA). CS is abundant in cartilage, where it exists as unbranched polysaccharide chains covalently linked to the core proteins of proteoglycans.
The Fluoresceinamine (FA)-Labeled Sodium Chondroitin Sulfate E (FACS-E) in this product is prepared by forming an amide bond between the fluorescent moiety FA and the carboxyl group of GlcUA within CS-E[1]. The raw material CS-E contains at least 50% E-type structural disaccharide units (4 and 6-O-sulfations of GalNAc). After conjugation, FA exhibits strong fluorescence, whereas unconjugated FA shows only weak fluorescence (approximately 1/150 of that after conjugation)[1], and therefore free FA has no significant effect on measurements.
Each vial contains 1 mg (FACS-E2(SqC)1) or 3 mg (FACS-E2(SqC)3) of lyophilized FACS-E. The excitation wavelength is 485－500 nm, and the emission wavelength is 510－525 nm. 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) After reconstitution, store the solution at −20 °C or below, protected from light. Preparing aliquots suitable for anticipated use is recommended.
4) Protect the product from strong light during handling. Exposure to intense light may cause photobleaching of FADS. The product may be used at room temperature if protected from strong light.
5) FACS-E is degraded by oxidising agents, reducing agents, strong acids, strong alkalis and heat.
6) Fluorescence intensity varies depending on the pH of the solution and decreases under acidic conditions. Please take note of the sample solution's pH when measuring fluorescence intensity.
7) This product is for research use only. It is not intended for use in diagnostic or therapeutic procedures.

Reference:
1) Ogamo A et al.: Carbohydr. Res., **105**, 69 (1982)

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