Creative Enzymes®

Chondroitinase B from Flavobacterium heparinum, Recombinant

Cat. No. NATE-0130

Lot. No. (See product label)

Introduction

Description	In enzymology, a chondroitin B lyase (EC 4.2.2.19) is an enzyme that catalyzes the chemical reaction:Eliminative cleavage of dermatan sulfate containing 1,4-beta-D-hexosaminyl and 1,3-beta-D-glucurosonyl or 1,3-alpha-L-iduronosyl linkages to disaccharides containing 4-deoxy-beta-D-gluc-4-enuronosyl groups to yield a 4,5-unsaturated dermatan-sulfate disaccharide (deltaUA-GalNAc-4S). This enzyme belongs to the family of lyases, specifically those carbon-oxygen lyases acting on polysaccharides.
Applications	As research reagent (glycosaminoglycan degradation). For the preparation of di- and oligo-saccharides of dermatan sulfate.
Synonyms	Chondroitinase B; EC 4.2.2.19; chondroitin B lyase; ChonB; ChnB

Product Information

Species	Flavobacterium heparinum
Source	Flavobacterium heparinum
EC Number	EC 4.2.2.19
CAS No.	52227-83-5
Molecular Weight	54,779 Da
Purity	> 90 % by reversed phase HPLC analysis.
Activity	> 550 IU/mg (substrate: dermatan sulfate)
Isoelectric point	9.4 – 9.6
Optimum pH	pH optimum for activity: 7-8; pH range for activity: 5-10
Optimum temperature	20°C – 37°C
Specificity	Dermatan sulfate (chondroitin sulfate B).
Unit Definition	One international unit (IU) is defined as the amount of enzyme that will liberate 1.0 µmole unsaturated oligosaccharides from dermatan sulfate per minute at 30°C and pH 8.0.

Usage and Packaging

Package	vial of 5 µg

Storage and Shipping Information

Stability	Expiration is 30 months from manufacturing date, frozen at –70°C in aqueous buffers containing Sodium Chloride, Sodium Phosphate and Sucrose 5%.