



## Chondroitinase ABC

Product Number:CD0401

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### Shipping and Storage

Store at -25°C~-10°C.(Note: Avoid freezing at temperatures below -25°C; prolonged freezing may result in loss of active parts).Validity period: 24 months.

### Description

Chondroitinase ABC is derived from *Proteus vulgaris* and can degrade chondroitin sulfate A, chondroitin sulfate B, and chondroitin sulfate C.This enzyme passes through  $\beta$  The elimination mechanism acts on the repeat units of disaccharides  $\beta$  1-4 glycosides and cut them off. The product of the degradation reaction is oligosaccharides, mainly unsaturated disaccharides.

Enzymology number	EC 4.2.2.4
CAS number	9024-13-9
Source	<i>Proteus vulgaris</i>
Form	Solution (containing 50% glycerol)
Enzyme activity	Research level;Activity: $\geq 0.05$ UN/ $\mu$ l(Chondroitin sulfate C as substrate)
Purity	$\geq 90\%$ (SDS-PAGE)

### Application

1. Can be used for HPLC determination of chondroitin sulfate content;
2. Enzymatic preparation of low molecular weight chondroitin sulfate;
3. Refinement of heparin and heparin like substances.

### Unit definition

An active unit (UN) refers to can get 1.0 $\mu$ mol of 2-acetylamino-2-deoxy-3-O-( $\beta$ -D-pyranoglucuronic acid-4-ene)-4-O-sulfate-D-galactose( $\Delta$ Di-4S) catalytic production from chondroitin sulfate A at 37°C and pH 6.0 for 1 minute or get 1.0 $\mu$ mol of 2-acetylamino-2-deoxy-3-O-( $\beta$ -D-pyranoglucuronic acid-4-ene)-6-O-sulfate-D-galactose( $\Delta$ Di-6S) catalytic production from chondroitin sulfate C.

### Protocol

The product of Chondroitinase ABC degradation of chondroitin sulfate A, B, or C can be detected at a wavelength of 232nm using a UV visible spectrophotometer.

### Recommended usage conditions

1. Storage buffer:20 mmol/L Tris-HCl (pH 8.0), 4 mmol/L CaCl<sub>2</sub>, 0.3% NaCl.
2. Optimum pH:7.8;Scope of application:6-10.
3. Optimum Temperature:37°C;Temperature applicable range:20 ~ 42°C.