

## hyaluronan synthase

Cat. No. EXWM-2440

Lot. No. (See product label)

### Introduction

**Description** The enzyme from Streptococcus Group A and Group C requires Mg<sup>2+</sup>. The enzyme adds GlcNAc to nascent hyaluronan when the non-reducing end is GlcA, but it adds GlcA when the non-reducing end is GlcNAc. The enzyme is highly specific for UDP-GlcNAc and UDP-GlcA; no copolymerization is observed if either is replaced by UDP-Glc, UDP-Gal, UDP-GalNAc or UDP-GalA. Similar enzymes have been found in a variety of organisms.

**Synonyms** spHAS; seHAS

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 2.4.1.212

**CAS No.** 39346-43-5

**Reaction** (1) UDP- $\alpha$ -N-acetyl-D-glucosamine +  $\beta$ -D-glucuronosyl-(1 $\rightarrow$ 3)-N-acetyl- $\beta$ -D-glucosaminyl-(1 $\rightarrow$ 4)-[nascent hyaluronan] = UDP + N-acetyl- $\beta$ -D-glucosaminyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucuronosyl-(1 $\rightarrow$ 3)-N-acetyl- $\beta$ -D-glucosaminyl-(1 $\rightarrow$ 4)-[nascent hyaluronan]; (2) UDP- $\alpha$ -D-glucuronate + N-acetyl- $\beta$ -D-glucosaminyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucuronosyl-(1 $\rightarrow$ 3)-[nascent hyaluronan] = UDP +  $\beta$ -D-glucuronosyl-(1 $\rightarrow$ 3)-N-acetyl- $\beta$ -D-glucosaminyl-(1 $\rightarrow$ 4)- $\beta$ -D-glucuronosyl-(1 $\rightarrow$ 3)-[nascent hyaluronan]

**Notes** This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

### Storage and Shipping Information

**Storage** Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.