Creative Enzymes®

# glucuronosyl-N-acetylglucosaminyl-proteoglycan 4-α-N-acetylglucosaminyltransferase

*Cat. No. EXWM-2453*

*Lot. No.* (See product label)

## Introduction

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| ***Description*** | Involved in the biosynthesis of heparin and heparan sulfate. Some forms of the enzyme from human (particularly the enzyme complex encoded by the EXT1 and EXT2 genes) act as bifunctional glycosyltransferases, which also have the 4-β-glucuronosyltransferase (EC 2.4.1.225, N-acetylglucosaminyl-proteoglycan 4-β-glucuronosyltransferase) activity required for the synthesis of the heparan sulfate disaccharide repeats. Other human forms of this enzyme (e.g. the product of the EXTL1 gene) have only the 4-α-N-acetylglucosaminyltransferase activity. In Caenorhabditis elegans, the product of the rib-2 gene displays the activities of this enzyme as well as EC 2.4.1.223, glucuronosyl-galactosyl-proteoglycan 4-α-N-acetylglucosaminyltransferase. |
| ***Synonyms*** | α-N-acetylglucosaminyltransferase II glucuronyl-N-acetylglucosaminylproteoglycan α-1,4-N-acetylglucosaminyltransferase |

## Product Information

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| ***Form*** | Liquid or lyophilized powder |
| ***EC Number*** | EC 2.4.1.224 |
| ***CAS No.*** | 336193-98-7 |
| ***Reaction*** | UDP-N-acetyl-D-glucosamine + β-D-glucuronosyl-(1→4)-N-acetyl-α-D-glucosaminyl-proteoglycan = UDP + N-acetyl-α-D-glucosaminyl-(1→4)-β-D-glucuronosyl-(1→4)-N-acetyl-α-D-glucosaminyl-proteoglycan |
| ***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

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