Creative Enzymes®

[heparan sulfate]-glucosamine 3-sulfotransferase 3

Cat. No. EXWM-3390

Lot. No. (See product label)

Introduction

Description

Two major substrates contain the tetrasaccharides: → undetermined 2-sulfo-uronic acid→ GlcN2S→ IdoA2S→ GlcN*→ and → undetermined 2-sulfo-uronic acid→ GlcN2S→ IdoA2S→ GlcN6S*→ (symbols as in 2-Carb-38) with modification of the N-unsubstituted glucosamine residue (shown with an asterisk). Modification of selected sequences containing N-sulfo-glucosamine residues cannot yet be excluded. The 3-O-sulfated heparan sulfate can be utilized by Herpes simplex virus type 1 as an entry receptor to infect the target cells. There are two isozymes, known as 3-OST-3A and 3-OST-3B, which have identical catalytic domains but are encoded by different mammalian genes. The specificity of this enzyme differs from that of the other [heparan sulfate]-glucosamine 3-sulfotransferases. It is inefficient at modifying precursors of the antithrombin binding site [in contrast to EC 2.8.2.23 ([heparan sulfate]-glucosamine 3-sulfotransferase 1)] and it does not modify glucosamine preceded by GlcA2S [unlike EC 2.8.2.29 ([heparan sulfate]-glucosamine 3-sulfotransferase 2)].

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 2.8.2.30

Reaction

3'-phosphoadenylyl sulfate + [heparan sulfate]-glucosamine = adenosine 3',5'-bisphosphate + [heparan sulfate]-glucosamine 3-sulfate

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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.