Creative Enzymes®

[heparan sulfate]-glucosamine 3-sulfotransferase 2

Cat. No. EXWM-3388

Lot. No. (See product label)

Introduction

Description	This enzyme sulfates the residues marked with an asterisk in sequences containing at least → IdoA2S→ GlcN*→ or → GlcA2S→ GlcN*→ (symbols as in 2-Carb-38). Preference for GlcN2S vs. unmodified GlcN has not yet been established. Additional structural features are presumably required for substrate recognition, since the 3-O-sulfated residue is of low abundance, whereas the above IdoA-containing sequence is quite abundant. This enzyme differs from the other [heparan sulfate]-glucosamine 3-sulfotransferases by modifying selected glucosamine residues preceded by GlcA2S; EC 2.8.2.23 ([heparan sulfate]-glucosamine 3-sulfotransferase 1) prefers GlcA or IdoA, whereas EC 2.8.2.30 ([heparan sulfate]-glucosamine 3-sulfotransferase 3) prefers IdoA2S.
Synonyms	glucosaminyl 3-O-sulfotransferase; heparan sulfate D-glucosaminyl 3-O-sulfotransferase; isoform/isozyme 2 (3-OST-2, HS3ST2)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.8.2.29
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 ℃.