

**HS3ST1 Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13378b****Specification**

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**HS3ST1 Antibody (C-term) Blocking peptide - Product Information**Primary Accession [O14792](#)**HS3ST1 Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 9957**Other Names**

Heparan sulfate glucosamine 3-O-sulfotransferase 1, Heparan sulfate D-glucosaminyl 3-O-sulfotransferase 1, 3-OST-1, Heparan sulfate 3-O-sulfotransferase 1, h3-OST-1, HS3ST1, 3OST, 3OST1

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP13378b was selected from the C-term region of HS3ST1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**HS3ST1 Antibody (C-term) Blocking peptide - Protein Information****Name** HS3ST1**Synonyms** 3OST, 3OST1**Function**

Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) to catalyze the transfer of a sulfo group to position 3 of glucosamine residues in heparan (PubMed:<a href="http://www.uniprot.org/citations/9346953" target="\_blank">9346953</a>, PubMed:<a href="http://www.uniprot.org/citations/8900198" target="\_blank">8900198</a>, PubMed:<a href="http://www.uniprot.org/citations/9988768" target="\_blank">9988768</a>). Catalyzes the rate limiting step in the biosynthesis of heparan sulfate (HSact) (PubMed:<a href="http://www.uniprot.org/citations/8900198" target="\_blank">8900198</a>, PubMed:<a href="http://www.uniprot.org/citations/9988768" target="\_blank">9988768</a>). This modification is a crucial step in the biosynthesis of anticoagulant heparan sulfate as it completes

the structure of the antithrombin pentasaccharide binding site (PubMed:<a href="http://www.uniprot.org/citations/8900198" target="\_blank">8900198</a>, PubMed:<a href="http://www.uniprot.org/citations/9988768" target="\_blank">9988768</a>).

**Cellular Location**

Golgi apparatus lumen.

**Tissue Location**

Highly expressed in the brain and kidney and weakly expressed in the heart, lung and placenta

**HS3ST1 Antibody (C-term) Blocking peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

**HS3ST1 Antibody (C-term) Blocking peptide - Images****HS3ST1 Antibody (C-term) Blocking peptide - Background**

Heparan sulfate biosynthetic enzymes are key components ingenerating a myriad of distinct heparan sulfate fine structures that carry out multiple biologic activities. The enzyme encoded by this gene is a member of the heparan sulfate biosynthetic enzyme family. It possesses both heparan sulfate glucosaminyl 3-O-sulfotransferase activity, anticoagulant heparan sulfate conversion activity, and is a rate limiting enzyme for synthesis of anticoagulant heparan. This enzyme is an intraluminal Golgi resident protein.

**HS3ST1 Antibody (C-term) Blocking peptide - References**

Lamesch, P., et al. Genomics 89(3):307-315(2007) Edavettal, S.C., et al. Biochemistry 43(16):4680-4688(2004) Hernaiz, M., et al. Biochem. Biophys. Res. Commun. 276(1):292-297(2000) Liu, J., et al. J. Biol. Chem. 274(8):5185-5192(1999) Shworak, N.W., et al. J. Biol. Chem. 274(8):5170-5184(1999)