

**HS3ST3A1 Antibody (C-term) Blocking Peptide**  
Synthetic peptide  
Catalog # BP9514b**Specification**

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**HS3ST3A1 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [O9Y663](#)**HS3ST3A1 Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 9955

**Other Names**

Heparan sulfate glucosamine 3-O-sulfotransferase 3A1, Heparan sulfate D-glucosaminyl 3-O-sulfotransferase 3A1, 3-OST-3A, Heparan sulfate 3-O-sulfotransferase 3A1, h3-OST-3A, HS3ST3A1, 3OST3A1, HS3ST3A

**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.

**HS3ST3A1 Antibody (C-term) Blocking Peptide - Protein Information**

Name HS3ST3A1

Synonyms 3OST3A1, HS3ST3A

**Function**

Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) to catalyze the transfer of a sulfo group to an N-unsubstituted glucosamine linked to a 2-O-sulfo iduronic acid unit on heparan sulfate (PubMed: [10520990](http://www.uniprot.org/citations/10520990), PubMed: [10608887](http://www.uniprot.org/citations/10608887), PubMed: [15304505](http://www.uniprot.org/citations/15304505), PubMed: [9988768](http://www.uniprot.org/citations/9988768)). Catalyzes the O-sulfation of glucosamine in IdoUA2S-GlcNS and also in IdoUA2S-GlcNH<sub>2</sub> (PubMed: [10520990](http://www.uniprot.org/citations/10520990), PubMed: [15304505](http://www.uniprot.org/citations/15304505), PubMed: [9988768](http://www.uniprot.org/citations/9988768)). The substrate-specific O-sulfation generates an enzyme-modified heparan sulfate which acts as a binding receptor to Herpes simplex virus-1 (HSV-1) and permits its entry (PubMed: [10520990](http://www.uniprot.org/citations/10520990)). Unlike HS3ST1/3-OST-1, does not convert non-anticoagulant

heparan sulfate to anticoagulant heparan sulfate (PubMed:<a href="http://www.uniprot.org/citations/10520990" target="\_blank">10520990</a>).

**Cellular Location**

Golgi apparatus membrane; Single-pass type II membrane protein

**Tissue Location**

Ubiquitous. Most abundant in heart and placenta, followed by liver and kidney.

**HS3ST3A1 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**HS3ST3A1 Antibody (C-term) Blocking Peptide - Images****HS3ST3A1 Antibody (C-term) Blocking Peptide - Background**

Heparan sulfate biosynthetic enzymes are key components in generating a myriad of distinct heparan sulfate fine structures that carry out multiple biologic activities. The enzyme is a member of the heparan sulfate biosynthetic enzyme family. It is a type II integral membrane protein and possesses heparan sulfate glucosaminyl 3-O-sulfotransferase activity. The sulfotransferase domain of this enzyme is highly similar to the same domain of heparan sulfate D-glucosaminyl 3-O-sulfotransferase 3A1, and these two enzymes sulfate an identical disaccharide.

**HS3ST3A1 Antibody (C-term) Blocking Peptide - References**

Levy, D., et al. BMC Med. Genet. 8 SUPPL 1, S3 (2007) : Moon, A.F., et al. J. Biol. Chem. 279(43):45185-45193(2004) Clark, H.F., et al. Genome Res. 13(10):2265-2270(2003) Salehi, L.B., et al. Hum. Genet. 111 (4-5), 401-404 (2002) : Liu, J., et al. J. Biol. Chem. 274(53):38155-38162(1999) Shukla, D., et al. Cell 99(1):13-22(1999)