

## Product datasheet for RC210819

### HS3ST2 (NM\_006043) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HS3ST2 (NM_006043) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HS3ST2
Synonyms:	3OST2; 3OST2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210819 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCTATAGGTCCTGGGCCGCGGGGCCACCTCAGCCGGAGGGCGCGCAGGCTGCTCTTCGCCT  
TCACGCTCTCGCTCTCCTGCACTTACCTGTGTTACAGTTCCTGTGCTGCTGCGACGACCTGGGTCGGAG  
CCGCTCTCGGCGCCTCGCTGCCTCCGCGGCCAGCGGGCGGCCAGAACTTCTCCAGAAGTCC  
CGCCCTGTGATCCCTCCGGCCGACGCCAGCGAGCCAGCGCTCCAGCGGCCCGCCGCCCGCTGC  
CGCCCTCGCTCTCCGTTCCAACCACTCCGGCTCACCAAGCTGGGTACCAAGCGGTTGCCCAAGC  
CCTCATTGTGGCGTGAAGAAGGGGGCACCCGGGCCGTGCTGGAGTTTATCCGAGTACACCCGGACGTG  
CGGCCCTTGGCACGGAACCCCACTTCTTTGACAGGAACTACGGCCGCGGCTGGATTGGTACAGGAGCC  
TGATGCCAGGACCTCGAGAGCCAGATCACGCTGGAGAAGACGCCAGCTACTTTGCTCACTCAAGAGGC  
TCCTCGACGATCTTCAACATGTCCCGAGACCAAGCTGATCGTGGTTGTGCGGAACCTGTGACCCGT  
GCCATCTCTGATTACACGACACTCTCAAGAAGCCGACATCCCGACCTTTGAGGGCTCTCCTTCC  
GCAACCGACCCCTGGCCTGGTGGACGTGTCATGGAACGCCATCCGCATCGGCATGTACGTGCTGCACCT  
GGAGAGCTGGCTGCAGTACTTCCCGTAGCTCAGATCACTTCGTCAGTGGCGAGCGACTCATCACTGAC  
CCGGCCGGGAGATGGGGCGAGTCCAGGACTTCTGGGCATTAAGAGATTATCACGACAAAGCACTTCT  
ATTTCAACAAGACCAAAGGATTCCCTTGCTTGAAAAAACAGAATCGAGCCTCCTGCCTGATGCTTGGG  
CAAATCAAAGGGAGAATCATGTACAGATTGATCCTGAAGTGATAGACCAGCTCCGAGAATTTTATAGA  
CCGTATAATCAATTTTATGAAACCGTTGGGCAGGACTTCAGTGGGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC210819 protein sequence  
Red=Cloning site Green=Tags(s)

MAYRVLGRAGPPQPRRARRLLFAFTLSLCTYLCSYFLCCDDLGRSRLLGAPRCLRGPSAGGQKLLQKS  
 RPCDPSGPTPSEPSAPSAPAAAVPAPRLSGSNHSGSPKLGTKRLPQALIVGVKGGTRAVLEFIRVHPDV  
 RALGTEPHFFDRNYGRGLDWYRSLMPRTLESQITLEKTPSYFVTQEAPRRIFNMSRDTKLIVVVRNPVTR  
 AISDYTQTLKKPDIPTFEGLSFRNRTLGLVDVSWNAIRIGMYVLHLESWLQYFPLAQIHFVSGERLITD  
 PAGEMGRVQDFLGIKRFITDKHFYFNKTKGFPLKKTESLLPRCLGKSKGRTHVQIDPEVIDQLREFYR  
 PYNIKFYETVGGQDFRWE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6244\\_d01.zip](https://cdn.origene.com/chromatograms/mk6244_d01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_006043

**ORF Size:** 1101 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_006043.2](#)

**RefSeq Size:** 1968 bp

**RefSeq ORF:** 1104 bp

**Locus ID:** 9956

**UniProt ID:** [Q9Y278](#)

**Cytogenetics:** 16p12.2

**Domains:** Sulfotransfer

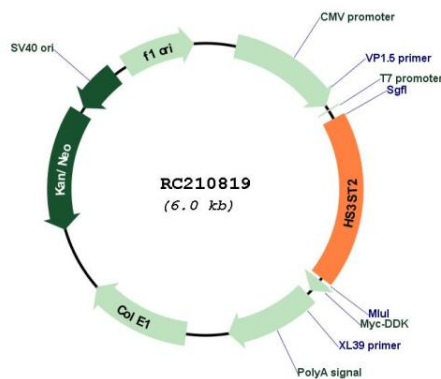
**Protein Families:** Transmembrane

**Protein Pathways:** Heparan sulfate biosynthesis

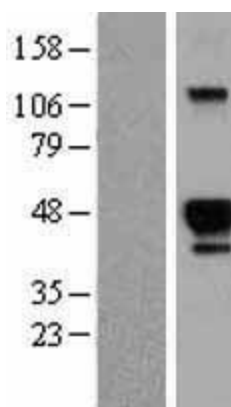
**MW:** 41.5 kDa

**Gene Summary:** 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 encoded by this gene 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. This gene is expressed predominantly in brain and may play a role in the nervous system. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC210819



Western blot validation of overexpression lysate (Cat# [LY416916]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210819 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).