

Product datasheet for RC209249

HS3ST3B1 (NM_006041) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HS3ST3B1 (NM_006041) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HS3ST3B1
Synonyms:	3-OST-3B; 3OST3B1; h3-OST-3B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209249 representing NM_006041 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGCAGCGCCTGAGTGGCGGCAGATCTTGCCCTCGATGTCCCCGGCCGGCTCTACCGCAGCCCGCCG
CGCCCCCGCCCGGTGAGGAGGAAGCTCGCGTGTCTTCGCCATGCTCTGCGTCTGGCTCTATATGTT
CCTGTACTCGTGCCTGGCTCTGCGCCCGCCGCGGGGCTGCTGCTCCTGGGCTCTGGTCCCGCCG
GCACACGACCCCGCAGCCCTGGCCACAGCTCCGGACGGGACGCCCCCAGGCTGCCGTTCCGGGCGCCG
CAGCCACCCCACTGGCTTCAGGCAAGGAGATGGCCGAGGGCGCTGCGAGCCGGAGGAGCAGAGTCCGA
GGTGCCGACTCCCAAGCCCATCTCCAGCTTTTTCAGTGGGTCTGGGAGCAAGCAGCTGCCGACAGCC
ATCATCATCGGCGTGAAGAAGGGCGGCACGCGGGCGCTGCTGGAGTTTCTGCGCTGCACCCCGACGTGC
GCGCCGTGGGCGCCGAGCCCAATTTCTTCGATCGCAGCTACGACAAGGGCCTCGCTTGGTACCGGGACCT
GATGCCAGAACCCTGGACGGGCAGATCACCATGGAGAAGACGCCAGTTACTTCGTACGCGGGAGGCC
CCTGCGGCATCTCGCCATGTCCAAGGACACCAAGCTCATCGTGGTGGTGGCGGGACCCGGTGACCAGGG
CCATCTCGGACTACACGACAGCCTGTCCAAGCGGCCGACATCCCCACCTTCGAGAGCTTGACGTTCAA
AAACAGGACAGCGGGCCTCATCGACACGTCGTGGAGCGCCATCCAGATCGGCATCTACGCCAAGCACCTG
GAGCACTGGCTGCGCCACTTCCCATCCGCCAGATGCTCTTCGTGAGCGGCGAGCGGCTCATCAGCGACC
CGGCCGGGAGCTGGGCGCGTGAAGACTTCTGGGCCCTCAAGAGGATCATCACGGACAAGCACTTCTA
CTTCAACAAGACCAAGGGCTTCCCTGCTGAAGAAGGGCGGAGGGCAGCAGCCGGCCCCATTGCCTGGGC
AAGACCAAGGACAGGACCCATCCTGAGATCGACCGGAGGTGGTGGCAGGCTGCGCGAGTTCTACCGGC
CTTTCAACCTCAAGTTCTACCAGATGACCGGGCAGCACTTTGGCTGGAT

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC209249 representing NM_006041
Red=Cloning site Green=Tags(s)

MGQRLSGGRSCLDVPGRLLPQPPPPPPVRRKLLALLFAML CVWL YMFLYSCAGSCAAAPGLLLLGS GSRA
 AHDPPALATAPDGT PRLPFRAPPATPLASGKEMAEGAASPEEQSPEVPD SPSPIS SFFSGSGSKQLPQA
 I IIGVKGGTRALLEFLRVHPD VRAVGAEPHF FDRSYDKGLAWYRDLMPRTL DGGITMEKTPSYFVTREA
 PARISAMSKDTKLIVVVRDPVTR AISDYQTLSKRDPDIPTFESLTFKNRTAGLIDTSWSAIQIGIYAKHL
 EHWLRHFPIRQMLFVSGERLISDPAGELGRVQDFLGLKR IITDKH FYFNKTKGF PCLKKAEGSSRP HCLG
 KTKGRTHPEIDREVRRRLREFYRPFNLKFYQMTGHDFGWD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4079_a09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_006041

ORF Size: 1170 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_006041.3](#)

RefSeq Size: 2032 bp

RefSeq ORF: 1173 bp

Locus ID: 9953

UniProt ID: [Q9Y662](#)

Cytogenetics: 17p12

Domains: Sulfotransfer

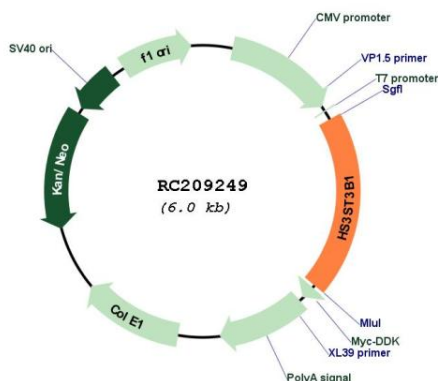
Protein Families: Transmembrane

Protein Pathways: Glycosaminoglycan degradation, Heparan sulfate biosynthesis

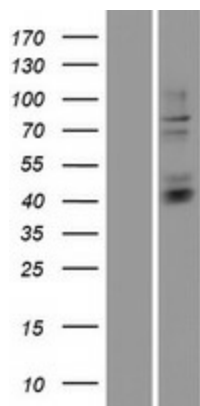
MW: 43.1 kDa

Gene Summary: The protein encoded by this gene is a type II integral membrane protein that belongs to the 3-O-sulfotransferases family. These proteins catalyze the addition of sulfate groups at the 3-OH position of glucosamine in heparan sulfate. The substrate specificity of individual members of the family is based on prior modification of the heparan sulfate chain, thus allowing different members of the family to generate binding sites for different proteins on the same heparan sulfate chain. Following treatment with a histone deacetylase inhibitor, expression of this gene is activated in a pancreatic cell line. The increased expression results in promotion of the epithelial-mesenchymal transition. In addition, the modification catalyzed by this protein allows herpes simplex virus membrane fusion and penetration. A very closely related homolog with an almost identical sulfotransferase domain maps less than 1 Mb away. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]

Product images:



Circular map for RC209249



Western blot validation of overexpression lysate (Cat# [LY416914]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209249 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).