

## Product datasheet for **MR229398**

### Hs3st5 (NM\_001253355) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Hs3st5 (NM\_001253355) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Hs3st5  
**Synonyms:** D930005L05Rik; Gm1151; Hs3ost5  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR229398 representing NM\_001253355  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTATTCAAACAGCAGGTGTGGCTGAGACAGAAGCTCCTGGTACTGGGAAGCCTTGCTGTTGGGAGCC  
TCCTGTATCTAGTTGCCAGAGTTGGGAGCTTGATAGGCTCCAGCCATTTGCCCTGTTGAAAGTCGATT  
TGGTGGTGGCCACAACCAGGCTGAGTTGCCACTGCGGGCCCTGCAGTTAAGAGAGGCTTGCTGCATGAG  
TTCCGGAAGGGCAATTCTTCCAAGGAGCAGTTACCTCCATGACCTGGTCCAACAGCTCCCAAAGCCA  
TTATCATTGGGGTGAGAAAAGGGGCACAAGGGCCCTGCTAGAGATGCTCAACCTCCATCCTGCAGTGGT  
CAAAGCTCCCAAGAGATCCACTTCTTTGACAATGATGAGAATTATGCCAAGGGCATTGAGTGGTACAGG  
AAAAAGATGCCTTTTTCTACCCTCAGCAAATCAGATTGAAAAGAGCCCGGCATATTTTCATCACAGAAG  
AGGTTCCGAAAGGATTTACAAGATGAACCTCATCCATCAAGCTGTTGATCATTGTCAGGGAGCCGACCAC  
AAGAGCAATTTCTGATTACTCAGGTGCTAGAGGGGAAGGAGCGGAAGAACAACCTACTATAAGTTT  
GAAAACTGGCTATAGACCCTAATACCTGTGAAGTGAACACGAAATACAAGGCGTTTAGGACCAGCATAT  
ACACAAAACATCTGGAGCGCTGGTTGAAATACTTTCCATTGAACAGTTTCATATCGTAGATGGTGACCG  
TCTTATCACAGAACCTCTGCCGAACTACAGCTGGTGGAAAAGTTCTTAAACCTTCTCCGAGGATAAGT  
CAGTACAATTTATTTCAATGCTACCAGAGGTTTTACTGTCTGAGATTTAACATTATCTTTAATAAGT  
GCCTGGCGGCAGCAAGGGCGCATCCATCCAGAGGTAGACCCCTCCGTCATTACCAAATTCGCGCAAATT  
CTTTCATCCTTTAATCAAAAATTTTACCAGATCACTGGGAGGACATTGAACTGGCCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR229398 representing NM\_001253355  
Red=Cloning site Green=Tags(s)

MLFKQQVWLRQKLLVLGSLAVGSLLYLVARVGSGLDRLQPICPVESRFGGAHNQAELPLRALQFKRGLLHE  
 FRKGNSSKEQVHLHDLVQQLPKAIIIGVRKGGTRALLEMLNLHPAVVKASQEIHFDFDNDENYAKGIEWYR  
 KKMPFSYPQQITIEKSPAYFITEEVPERIYKMNSSIKLLIIVREPTTRAISDYTVLEKGERKNKTYKFK  
 EKLAIDPNTCEVNTKYKAVRTSIYTKHLERWLKYFPIEQFHIVDGDRLITEPLPELQLVEKFLNLP  
 PRISQYNLYFNATRGFYCLRFNIIIFNKCLAGSKGRIHPEVDPVITKLRKFHFPFNQKFYQITGRTL  
 NWP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001253355

**ORF Size:** 1038 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\\_001253355.1](#), [NP\\_001240284.1](#)

**RefSeq Size:** 3122 bp

**RefSeq ORF:** 1041 bp

**Locus ID:** 319415

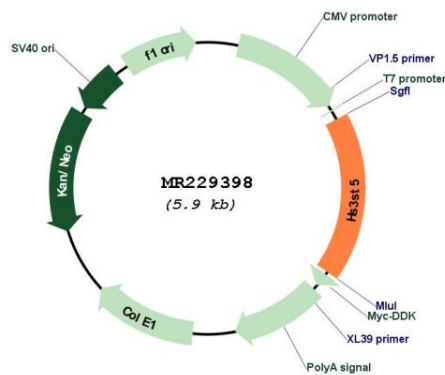
**UniProt ID:** [Q8BSL4](#)

**Cytogenetics:** 10 B1

**MW:** 40.5 kDa

**Gene Summary:** 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. Catalyzes the rate limiting step in the biosynthesis of heparan sulfate (HSact). This modification is a crucial step in the biosynthesis of anticoagulant heparan sulfate as it completes the structure of the antithrombin pentasaccharide binding site. Also generates GlcUA-GlcNS or IdoUA-GlcNS and IdoUA2S-GlcNH<sub>2</sub> (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR229398