

Product datasheet for **RG209256**

HS3ST1 (NM_005114) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: HS3ST1 (NM_005114) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: HS3ST1
Synonyms: 3OST; 3OST1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG209256 representing NM_005114
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGCGTCTCTGGGCGCGGTGCTGCTGGTGGCCAGCCCAGCTAGTGCCTTCCCGACCCCGG
AGCTAGGCCAGCAGGAGCTTCTGCGAAAGCGGGACCCTCCAGGATGACGTCCGCGATGGCGTGGCCCC
AAACGGCTCTGCCAGCAGTTGCCGACACCATCATCATCGGCGTGCGAAGGGCGGCACGCGCAGCTG
CTGGAGATGCTCAGCCTGCACCCCGACGTGGCGCGCGGAGAACGAGGTCCACTTCTTCGACTGGGAGG
AGCATTACAGCCACGGCTTGGGCTGGTACCTCAGCCAGATGCCCTTCTCCTGGCCACACCAGCTCACAGT
GGAGAAGACCCCGCGTATTTACAGTCGCCCAAAGTGCCTGAGCGAGTCTACAGCATGAACCCGTCCATC
CGGCTGCTGCTCATCTCGGAGACCCGTCGGAGCGCGTGCTATCTGACTACACCCAAGTGTCTACAACC
ACATGCAGAAGCACAAGCCCTACCCGTCCATCGAGGAGTTCCTGGTGCAGGATGGCAGGCTCAATGTGGA
CTACAAGGCCCTCAACCGCAGCCTTACCACGTGCACATGCAGAAGTGGCTGCGCTTTTTCCCGTGCGC
CACATCCACATTTGTGGACGGCGACCCGCTCATCAGGGACCCCTCCCTGAGATCCAAAAGGTCGAGAGGT
TCCTAAAGCTGTCGCCGAGATCAATGCTTCGAACTTCTACTTTAACAAAACCAAGGGCTTTTACTGCCT
GCGGGACAGCGGGCCGGACCGCTGCTTACATGAGTCCAAAAGCCGGCGCACCCCAAGTCGATCCAAA
CTACTCAATAAACTGCACGAATATTTTCATGAGCCAAATAAGAAGTTCCTCGAGCTTGTGGCAGAACAT
TTGACTGGCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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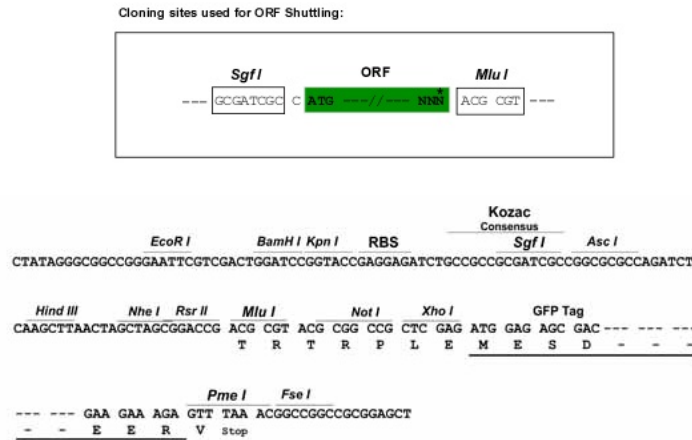
Protein Sequence: >RG209256 representing NM_005114
Red=Cloning site Green=Tags(s)

MAALLLGAVLLVAQPQLVPSRTAELGQQELLRKAGTLQDDVDRDGVAPNGSAQQLPQTIIIGVRKGGTRAL
 LEMLSLHPDVAAAENEVHFFDWEHSHGLGWYLSQMPFSWPHQLTVEKTPAYFTSPKVPERVYSMNPSI
 RLLLILRDPSEVLSDYTQVFNHMQKHKPYPSIEEFLVRDGRNLVDYKALNRSLYHVHMQNWLRFPLR
 HIHIVDGDRLIRDPFPEIQKVERFLKLSPOINASNIFYNKTGKFYCLRDSGRDRCLHESKGRAHPQVDPK
 LLNKLHEYFHEPNKKFFELVGRTFDWH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005114

ORF Size: 921 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_005114.2](#), [NP_005105.1](#)

RefSeq Size: 1965 bp

RefSeq ORF: 924 bp

Locus ID: 9957

UniProt ID: [O14792](#)

Cytogenetics: 4p15.33

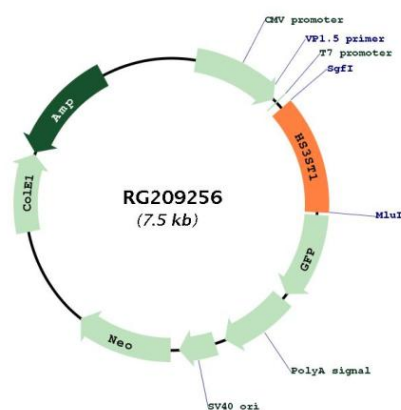
Domains: Sulfotransfer

Protein Families: Druggable Genome

Protein Pathways: Heparan sulfate biosynthesis

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 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. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG209256