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Product datasheet for RC209256

HS3ST1 (NM_005114) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HS3ST1 (NM_005114) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HS3ST1
Synonyms:	3OST; 3OST1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC209256 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGCGCTGCTCCTGGGCGCGGTGCTGCTGGTGGCCCAGCCCCAGCTAGTGCCTTCCCGCACCGCCG
AGCTAGGCCAGCAGGAGCTTCTGCGGAAAGCGGGGACCCTCCAGGATGACGTCCGCGATGGCGTGGCCCC
AAACGGCTCTGCCCAGCAGTTGCCGCAGACCATCATCATCGGCGTGCGCAAGGGCGGCACGCGCGCACTG
CTGGAGATGCTCAGCCTGCACCCCGACGTGGCGGCCGCGGAGAACGAGGTCCACTTCTTCGACTGGGAGG
AGCATTACAGCCACGGCTTGGGCTGGTACCTCAGCCAGATGCCCTTCTCCTGGCCACACCAGCTCACAGT
GGAGAAGACCCCCGCGTATTTCACGTCGCCCAAAGTGCCTGAGCGAGTCTACAGCATGAACCCGTCCATC
CGGCTGCTGCTCATCCTGCGAGACCCGTCGGAGCGCGTGCTATCTGACTACACCCAAGTGTTCTACAACC
ACATGCAGAAGCACAAGCCCTACCCGTCCATCGAGGAGTTCCTGGTGCGCGATGGCAGGCTCAATGTGGA
CTACAAGGCCCTCAACCGCAGCCTCTACCACGTGCACATGCAGAACTGGCTGCGCTTTTTCCCGCTGCGC
CACATCCACATTGTGGACGGCGACCGCCTCATCAGGGACCCCTTCCCTGAGATCCAAAAGGTCGAGAGGT
TCCTAAAGCTGTCGCCGCAGATCAATGCTTCGAACTTCTACTTTAACAAAACCAAGGGCTTTTACTGCCT
GCGGGACAGCGGCCGGGACCGCTGCTTACATGAGTCCAAAGGCCGGGCGCACCCCCAAGTCGATCCCAAA
CTACTCAATAAACTGCACGAATATTTTCATGAGCCAAATAAGAAGTTCTTCGAGCTTGTTGGCAGAACAT
TTGACTGGCAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC209256 protein sequence
Red=Cloning site Green=Tags(s)

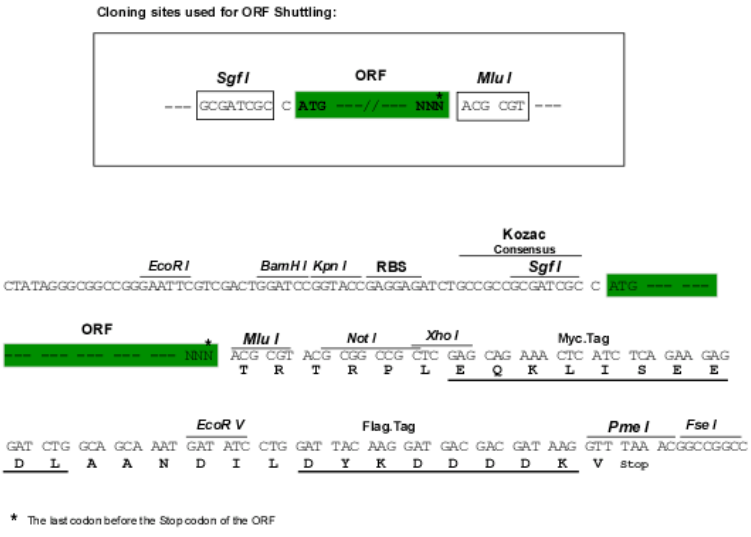
MAALLLGAVLLVAQPQLVPSRTAELGQQELLRKAGTLQDDVRDGVAPNGSAQQLPQTIIIGVRKGGTRAL
LEMLSLHPDVAAAENEVHFFDWEEHYSHGLGWYLSQMPFSWPHQLTVEKTPAYFTSPKVPERVYSMNPSI
RLLLILRDPSERVLSDYTQVFYNHMQKHKPYPSIEEFLVRDGRLNVDYKALNRSLYHVHMQNWLRFFPLR
HIHIVDGDRLIRDPFPEIQKVERFLKLSPQINASNFYFNKTKGFYCLRDSGRDRCLHESKGRAHPQVDPK
LLNKLHEYFHEPNKKFFELVGRTFDWH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6529_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005114

ORF Size: 921 bp

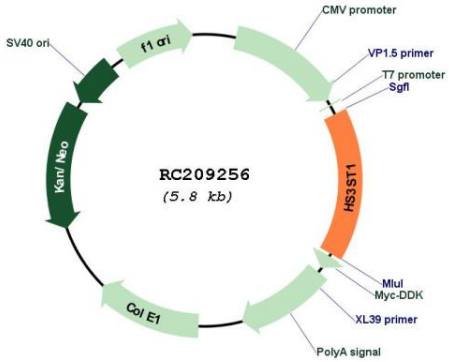
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

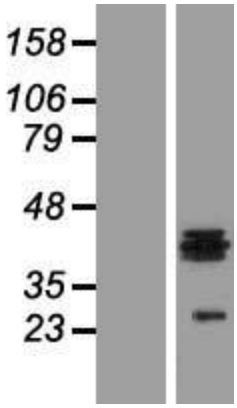
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_005114.4
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
MW:	35.8 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 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]

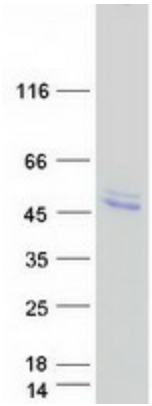
Product images:



Circular map for RC209256



Western blot validation of overexpression lysate (Cat# [LY417504]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209256 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HS3ST1 protein (Cat# [TP309256]). The protein was produced from HEK293T cells transfected with HS3ST1 cDNA clone (Cat# RC209256) using MegaTran 2.0 (Cat# [TT210002]).