

Product datasheet for **SC115469**

HS2ST1 (NM_012262) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HS2ST1 (NM_012262) Human Untagged Clone
Tag:	Tag Free
Symbol:	HS2ST1
Synonyms:	dj604K5.2; NFSRA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_012262 edited
 ATGGGGCTCCTCAGGATTATGATGCCGCCAAGTTGCAGCTGCTGGCGGTGGTGGCCTTC
 GCGGTGGCGATGCTCTTCTTGGAAAACCCAGATCCAGAACTGGAGGAGTCCCGCTCGAAG
 CTAGAAAAGGGCTATTGCAAGACACGAAGTCCGAGAAATTGAGCAGCGACATACAATGGAT
 GGCCCTCGGCAAGATGCCACTTTAGATGAGGAAGAGGACATGGTGATCATTTATAACAGA
 GTTCCAAAACGGCAAGCACTTCATTTACCAATATCGCCTATGACCTGTGTGCAAAGAAT
 AAATACCATGTCCTTCATATCAACTACCAAAAATAATCCAGTGATGTCATTGCAAGAT
 CAGGTGCGCTTTGTAAAGAATATAACTTCTGAAAGAGATGAAACCAGGATTTTATCAT
 GGACACGTTTCTACTTGGATTTTGCAAATTTGGTGTGAAGAAGAAACCAATTTACATT
 AATGTCATAAGGGATCCTATTGAGAGGCTAGTTTCTTATTACTTTCTGAGATTTGGA
 GATGATTATAGACCAGGGTTACGGAGACGAAAACAAGGAGACAAAAGACCTTTGATGAA
 TGTGTAGCAGAAGGTGGCTCAGACTGTGCTCCAGAGAAGCTCTGGCTTCAAATCCCGTTC
 TTCTGTGGCCATAGCTCCGAATGCTGGAATGTGGGAAGCAGGTGGGCTATGGATCAAGCC
 AAGTATAACCTAATTAATGAATATTTTCTGGTGGGAGTTACTGAAGAAGTTGAAGATTTT
 ATCATGTTATTGGAGGCAGCATTGCCCGGTTTTTTCAGGGGTGCTACTGAACTCTATCGC
 ACAGGAAAGAAATCTCATCTTAGGAAAACACAGAGAAGAACTCCCACTAAACAAACC
 ATTGCAAACTACAGCAATCTGATATTTGAAAATGGAGAATGAGTTCTATGAATTTGCA
 CTAGAGCAGTTCCAATTCATCAGAGCCCATGCCGTTTCGAGAAAAAGATGGAGACCTCTAC
 ATCCTCGCACAAAACCTTTTCTATGAAAAGATTTACCCTAAGTCGAACTGA



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_012262 unedited
 TTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGTTTCATGGNGCTC
 CTCAGGATTATGATGCCGCCAAGTTGCAGCTGCTGGCGGTGGTGGCCTTCGCGGTGGCG
 ATGCTCTTCTTGGAAAACCAGATCCAGAAACTGGAGGAGTCCCGCTCGAAGCTAGAAAAGG
 GCTATTGCAAGACACGAAGTCCGAGAAATTGAGCAGCGACATAACAATGGATGGCCCTCGG
 CAAGATGCCACTTAGATGAGGAAGAGGACATGGTGATCATTTATAACAGAGTCCCAAAA
 ACGGCAAGCACTTCATTTACCAATATCGCCTATGACCTGTGTGCAAAGAATAAATACCAT
 GTCCTTCAATCAACACTACCAAAAATAATCCAGTGATGTCATTGCAAGATCAGGTGCGC
 TTTGTAAAGAATAAATTCCTGAAAAGAGATGAAACCAGGATTTTATCATGGACACGTT
 TCTTACTTGGATTTTGCAAAATTTGGTGTGAAGAAGAAACCAATTTACATTAATGTCATA
 AGGGATCCTATTGAGAGGCTAGTTTCTTATTACTTTCTGAGATTTGGAGATGATTAT
 AGACCAGGGTTACGGAGACGAAAACAAGGAGACANAAAGACCTTTGATGAATGTGTAGCA
 GAAGGTGGCTCAGACTGTGCTCCAGAGAAGCTCTGGCTCAAATCCCGTTCTTCTGTGGC
 CATAGCTCCGAATGCTGGAATGTGGGAAGCANGTGGGCTATGGNATCAAGCCAGTATAAC
 CTAATAATGAATATTNTCTGGTGGGAGTACTGAAGAACTTGAGATTTATCATGGTATT
 GGNAGGCAGCATGCCCGTTTTTCAGGGGTGCTACTGAACTCTATCGACAGGAAAGAAT
 CTCATCTANGAAACCACAGAGAGAACTCCCACTAAACAAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_012262 unedited
 NNTTCTCTGGACCCGCGGCCGAATCTAGNGATCGGTTTTTTTTTTTTTTTTTTTATTTA
 TCAAACACAAATTTATATCAAGATTAACTTTTTCAACCAGCTTACAAGCAGACTTTTCCC
 TTTCTTTGTTAAAAAATGAATGGTATGAACTATATGTTAAAGATGTTTCTATAATACCT
 TACATTTACATAGCGCTTACAATTTTCAAAGTCTTTCACATGCCATCTCATTTAATCC
 TCAACAACAGCCCTGTGAGGTAGGTACAGCAGGTATTATTATCCTCATTTCAAGATGAGGA
 AATTGAGGCAAAGAGAGGTTAAGTGACTTGCCCAAGATCACACAGCTGTAAGTGCTAGAG
 CTAGGACCTGAAATCAAGTTTTTGACTCCTTGTCCAGTACTCATTCCACTGTAATTACT
 GCCTCAAGTTATGAATAATGAACTGTGTATCAAAATGAAAGCTTACTGAAGTTCATTTT
 AGTGATGTCTTAAACAGTAAAGTTAAATGAGAAATACAAGAACAGTAGGTCTGATGGTTTT
 ACTTGACATAAAATTTGGTCAAAACCCTTTTGTCTAATTACTTGAACCTTTTGGTCCA
 AATACATAAAATATGCAATTTTACAGCATTTTCTTGTTTTGTAAATGCAATGCTTTAA
 AACACATTATAAAGCACCTTAGTAAAAATAGTCTACAGGTAAGTACAGAAGAAGTANG
 GAAAATTCATCCCATACCCACAGCTCACTAATGGAGTCATAATACCGAGTCACCGATATCT
 CAGTTTACAGCTTTACAATTAACCCATGGAGAAAACAATACTAACTTACTTTTTTTGAAA
 TAAAGGGGAAAAACCTAACTAAACCTCAGACAATCTCAATATTCCTTTGAGAATTCTT
 CCCCATTTTAAAAATGAGGGAGGCACGAATGAGAAAAACCGGTTTGTAGCGCTTAACTT
 TTTTACAA

Restriction Sites:

NotI-NotI

ACCN:

NM_012262

Insert Size:

2450 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_012262.2](#), [NP_036394.1](#)

RefSeq Size: 6708 bp

RefSeq ORF: 1071 bp

Locus ID: 9653

UniProt ID: [Q7LGA3](#)

Cytogenetics: 1p22.3

Domains: HS2ST

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. This gene encodes a member of the heparan sulfate biosynthetic enzyme family that transfers sulfate to the 2 position of the iduronic acid residue of heparan sulfate. The disruption of this gene resulted in no kidney formation in knockout embryonic mice, indicating that the absence of this enzyme may interfere with the signaling required for kidney formation. Two alternatively spliced transcript variants that encode different proteins have been found for this gene. [provided by RefSeq, Aug 2008]

Transcript Variant: This variant (1) represents the longer transcript and it encodes the longer protein (isoform 1). Sequence Note: The RefSeq transcript and protein were derived from transcript and genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.