

Product datasheet for **SC127166**

SGSH (NM_000199) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SGSH (NM_000199) Human Untagged Clone
Tag:	Tag Free
Symbol:	SGSH
Synonyms:	HSS; MPS3A; SFMD
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC127166 sequence for NM_000199 edited (data generated by NextGen Sequencing)

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ATGAGCTGCCCGCTGCCCGCCTGCTGCGCGCTGCTGCTAGTCCTGGGGCTCTGCCGGGG
CGTCCCCGGAACGCACTGCTGCTCCTCGCGGATGACGGAGGCTTTGAGAGTGGCGCGTAC
AACAAACAGCGCCATCGCCACCCCGCACCTGGACGCCTTGGCCCGCCGACGCTCCTCTTT
CGCAATGCCTTACCTCGGTACGAGCTGCTCTCCAGCCGCGCCAGCCTCCTCACTGGC
CTGCCCCAGCATCAGAATGGGATGTACGGGCTGCACCAGGACGTGCACCACTTCAACTCC
TTCGACAAGGTGCGGAGCCTGCCGCTGCTGCTCAGCCAAGCTGGTGTGCGCACAGGCATC
ATCGGGAAGAAGCACGTGGGGCCGGAGACCGTGTACCCGTTTGACTTTGCGTACACGGAG
GAGAATGGCTCCGTCCTCCAGGTGGGGCGGAACATCACTAGAATTAAGTCTCGTCCGG
AAATTCCTGCAGACTCAGGATGACCGGCCTTTCTTCTCTACGTGCTTCCACGACCCC
CACCGCTGTGGGCACTCCAGCCCCAGTACGGAACCTTCTGTGAGAAGTTTGGCAACGGA
GAGAGCGGCATGGGTGATCCAGACTGGACCCCCAGGCTACGACCCACTGGACGTG
CTGGTGCCTTACTTCGTCCCAACACCCCGGCAGCCGAGCCGACCTGGCCGCTCAGTAC
ACCACCGTCGGCCGCATGGACCAAGGAGTTGGACTGGTGTCCAGGAGCTGCGTGACGCC
GGTGTCTGAACGACACACTGGTGATCTTACGTCCGACAAACGGGATCCCTTCCCCAGC
GGCAGGACCAACCTGTAAGTGGCCGGCACTGCTGAACCCTTACTGGTGTATCCCCGGAG
CACCCAAAACGCTGGGGCCAAGTCAGCGAGGCCTACGTGAGCCTCCTAGACCTCACGCCC
ACCATCTTGGATTGGTTCTCGATCCCGTACCCAGCTACGCCATCTTTGGCTCGAAGACC
ATCCACCTCACTGGCCGGTCCCTCCTGCCGGCGCTGGAGGCCGAGCCCTCTGGGCCACC
GTCTTTGGCAGCCAGAGCCACCAGAGGTACCATGTCTTACCCATGCGCTCCGTGCGAG
CACCGGCACTTCCGCTCGTGCACAACCTCAACTTCAAGATGCCCTTCCCATCGACCCAG
GACTTCTACGTCTACCCACCTTCCAGGACCTCCTGAACCGCACACAGCTGGTCAAGCC
ACGGGCTGGTACAAGGACCTCCGTCATTACTACTACCGGGCGCGTGGGAGCTTACGAC
CGGAGCCGGGACCCACGAGACCCAGAACCTGGCCACCACCCGCGCTTTGCTCAGCTT
CTGGAGATGCTTCCGGACCAGCTGGCCAAGTGGCAGTGGGAGACCACGACCCCTGGGTG
TGCGCCCCGACGGCGTCTGGAGGAGAAGCTCTCTCCCAAGTGCAGCCCTCCACAAT
GAGCTGTGA
    
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Clone variation with respect to NM_000199.3

5' Read Nucleotide Sequence: >OriGene 5' read for NM_000199 unedited

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ACGACTTCTATAGGGCGGCCGGAATTCGGCACGAGGGAGAGCCGGTCCGGATCCCGA
TCCCGAGTCCGAGCCGCCCGCCATGAGCTGCCCCGTGCCCGCTGCTGCGCGCTGCTG
CTAGTCTGGGGCTCTGCCGGCGCGTCCCCGGAACGCACTGCTGCTCCTCGGGATGAC
GGAGGCTTTGAGAGTGGCGCGTACAACAACAGCGCCATCGCCACCCCGCACCTGGACGCC
TTGGCCCCGCCAGCCTCCTCTTTGCAATGCCTTACCTCGGTGAGCAGCTGCTCTCCC
AGCCGCGCCAGCCTCCTCACTGGCCTGCCCCAGCATCAGAATGGGATGTACGGGCTGCAC
CAGGACGTGCACCACTTCAACTCCTTCGACAAGGTGCGGAGCCTGCCGCTGCTGCTCAGC
CAAGCTGGTGTGCGCACAGGCATCATCGGGAAGAAGCACGTGGGGCCGGAGACCGTGTAC
CCGTTTGACTTTGCGTACACGGAGGAGAATGGCTCCGTCCTCCAGGTGGGGCGGAACATC
ACTAGAATTAAGCTGCTCGTCCGAAATTCCTGCAGACTCAGGATGACCGGCCTTTCTTC
CTCTACGTGCGCTTCCACGACCCCCACCCTGTGGGCACTCCAGCCCCAGTACGGAACC
TTCTGTGAGAAGTTTGGCAACGGAGAGAGCGGCATGGGTGATCCAGACTGGACCCCC
CAGGCCTACGACCCACTGGACGTGCTGGTGCCTTACTTCGTCCCCACCCGGCAGCCCG
AGCCGACCTGGCCGCTCAGTACCACCCGTCGGCCGATGGACCAANGAGTGNACTGGTGT
NCAGAGCTGGTACGCCCCGTGCTGCTGACGACCACTGGTGTACTTACGTCCGACACGGGAT
CCCTTCCAGCGGAGACCAACTGACTGGNCGCCCTGCTGACCTTACTGTTGCTNCCCGAG
CACCATAGCTGGGCGAGTACGAGGCCACTGACTCCN
    
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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_000199 unedited TATGGACCGCGNGCCGCAATCTAGAGTCGAGTTTTTNCCTTTTTTTTTTTTTTTTTTTTTTTT TTTAAACTTCTGTATATTTTACTAAAAAAAACCTTTTACAATAGCTGGCCTGGGGCCTCC TCCAGCCCACCCAGTATGGAGTGATAGGGAGGGAAGGGCAAGGGGAGCCACCTACTCA AGGAAGCGCCCTCCTTCGAGGGGTGCCAGGCCGAGGGGTGCCAGGCCGGCTTCTG CTCCCAGGTGGTGGAGGCAGGCAGGAACGGCACATTCTCCAGCAACGCCGACGTCA TCCAAGAATTAACCCAAGCCAGAGGACGGGCATCGCCACCCAGCAACGCCAGTGTACCC AAAAATTAGCCCAAGCCAGAGGACGGGCATTGCCACCCAGCAACGCCAGTGTACCCGAAG AATTAACCCAAGCCAGAGGACGGGCATCACCCACCCAGCAATGCCAGTGTACCCGAAGAAT TAACCCAAGCCAGAGGACGGGCATCGCCATGCCTTTCATCTTCGGACACTCTCAAAAAAGA TAAGCTTCTGCCAGAAACACCAGGTTCAAGCTCATCACTCAGGGAGCCTGCTGCCAA TCAGCTGAAACCTGCCTGGGGAACAGGGACTTGACCATGGGGCAAACAGAAGAAGCAGA AACCTGCCCAAAGGTCGCTCAAAGGCTTCTCTAGGCCAGACGCTGGTAAGGCCACGGC GCCGTGCTCCCAGGTGAGTGTCCGTGGGACCTGCGTACTGCCCCAGCGGAACCGGAAGCC CCTGCCTGCTCTTGGGAAGGTTCAAGAATATCTGTGGCTGCCCAAGCCTGAAGAGGCCCT AAGGCCTCCATTTGAAGTCCCAACCAAGCAAGAACAAGACTCCCTGAATGGGCTGGGGC CTGCCTGTCCGAAACACTTTGTTAAAATTCCTCGGCTGGAATGGTTACACCAGAACAATGG CTCCTGCATGAAGAAGCCCN
Restriction Sites:	NotI-NotI
ACCN:	NM_000199
Insert Size:	2880 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:	<ol style="list-style-type: none"> 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:	<u>NM_000199.2</u> , <u>NP_000190.1</u>
RefSeq Size:	2740 bp
RefSeq ORF:	1509 bp
Locus ID:	6448
UniProt ID:	<u>P51688</u>
Cytogenetics:	17q25.3
Domains:	Sulfatase

Protein Families:	Druggable Genome
Protein Pathways:	Glycosaminoglycan degradation, Lysosome, Metabolic pathways
Gene Summary:	This gene encodes the enzyme sulfamidase; one of several enzymes involved in the lysosomal degradation of heparan sulfate. Mutations in this gene are associated with the lysosomal storage disease mucopolysaccharidosis IIIA, also known as Sanfilippo syndrome A, which results from impaired degradation of heparan sulfate. Transcripts of varying sizes have been reported but their biological validity has not been determined. [provided by RefSeq, Jun 2017]