

## Product datasheet for **RG209249**

### HS3ST3B1 (NM\_006041) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	HS3ST3B1 (NM_006041) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	HS3ST3B1
Synonyms:	3-OST-3B; 3OST3B1; h3-OST-3B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209249 representing NM_006041 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGCAGCGCCTGAGTGGCGGCAGATCTTGCCTCGATGTCCCCGGCCGGCTCTACCGCAGCCGCCG  
CGCCCCCGCCCGGTGAGGAGGAAGCTCGCGTGTCTTCGCCATGCTCTGCGTCTGGTCTATATGTT  
CCTGTACTCGTGCCTGGCTCTGCGCCCGCCGCGGGGCTGCTGCTCCTGGGCTCTGGTCCCGCCG  
GCACACGACCCCGCAGCCCTGGCCACAGCTCCGGACGGGACGCCCCCAGGCTGCCGTTCCGGGCGCCG  
CAGCCACCCACTGGCTTCAGGCAAGGAGATGGCCGAGGGCGCTGCGAGCCGGAGGAGCAGAGTCCCGA  
GGTGCCGACTCCCAAGCCCATCTCCAGCTTTTTCAGTGGGTCTGGGAGCAAGCAGCTGCCGACAGCC  
ATCATCATCGGCGTGAAGAAGGGCGGCACGCGGGCGCTGCTGGAGTTTCTGCGCTGCACCCGACGTGC  
GCGCCGTGGGCGCCGAGCCCAATTTCTTCGATCGCAGCTACGACAAGGGCCTCGCTTGGTACCGGGACCT  
GATGCCAGAACCCTGGACGGGCAGATCACCATGGAGAAGACGCCAGTTACTTCGTACGCGGGAGGCC  
CCTGCGCGCATCTCGCCATGTCCAAGGACACCAAGCTCATCGTGGTGGTGGCGGGACCCGGTGACCAGGG  
CCATCTCGGACTACACGACAGCCTGTCCAAGCGGCCGACATCCCCACCTTCGAGAGCTTGACGTTCAA  
AAACAGGACAGCGGGCCTCATCGACACGTCGTGGAGCGCCATCCAGATCGGCATCTACGCCAAGCACCTG  
GAGCACTGGCTGCGCCACTTCCCATCCGCCAGATGCTCTTCGTGAGCGGCGAGCGGCTCATCAGCGACC  
CGGCCGGGAGCTGGGCCGCGTGAAGACTTCTGGGCCCTCAAGAGGATCATCACGGACAAGCACTTCTA  
CTTCAACAAGACCAAGGGCTTCCCTGCTGAAGAAGGGCGGAGGGCAGCAGCCGGCCCCATTGCCTGGGC  
AAGACCAAGGGCAGGACCCATCCTGAGATCGACCGCGAGGTGGTGGCAGGCTGCGCGAGTTCTACCGGC  
CTTTCAACCTCAAGTTCTACCAGATGACCGGGCAGACTTTGGCTGGAT

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTAA



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**Protein Sequence:** >RG209249 representing NM\_006041  
Red=Cloning site Green=Tags(s)

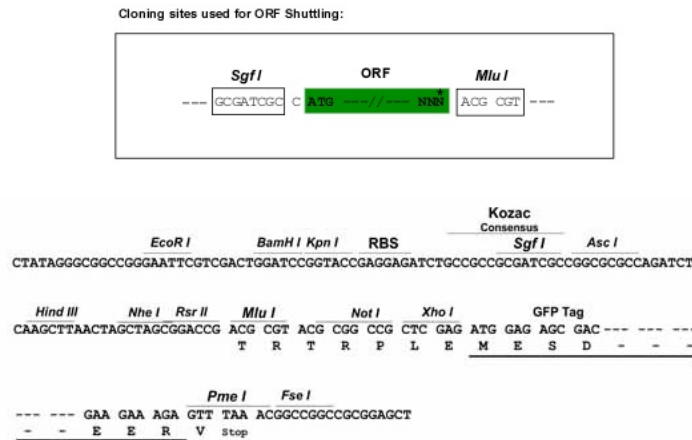
MGQRLSGGRSCLDVPGRLLPQPPPPPPVRRKLLALLFAMLCVWLYMFLYSCAGSCAAAPGLLLLGSRSRA  
 AHDPPALATAPDGTTPRLPFRAPPATPLASGKEMAEGAASPEEQSPEVPDPSPISSFFSGSGSKQLPQA  
 I IIGVKKGGTRALLEFLRVHPDVRAVGAEPHFDFDRSYDKGLAWYRDLMPRTLDDGQITMEKTPSYFVTR  
 PARISAMSKDTKLIVVVRDPVTRAI SDYTQTL SKRPDIPTFESLTFKNRTAGLIDT SWSAIQIGIYAKHL  
 EHWLRHFPIRQMLFVSGERLISDPAGELGRVQDFLGLKRIITDKHFYFNKTKGFPCLKKAEGSSRPCLG  
 KTKGRTHPEIDREVVRRLREFYRPFNLKIFYQMTGHDFGWD

TRTRPLE - GFP Tag - V

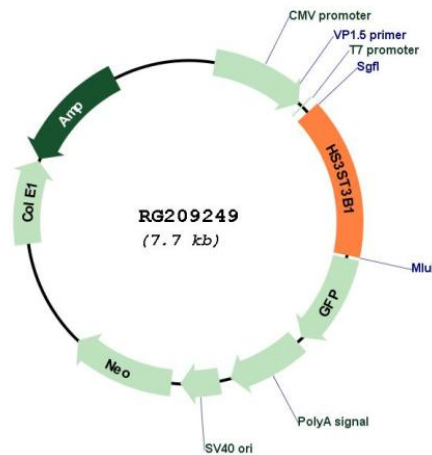
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_006041

<b>ORF Size:</b>	1170 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_006041.3</a>
<b>RefSeq Size:</b>	2032 bp
<b>RefSeq ORF:</b>	1173 bp
<b>Locus ID:</b>	9953
<b>UniProt ID:</b>	<a href="#">Q9Y662</a>
<b>Cytogenetics:</b>	17p12
<b>Domains:</b>	Sulfotransfer
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Glycosaminoglycan degradation, Heparan sulfate biosynthesis
<b>Gene Summary:</b>	The protein encoded by this gene is a type II integral membrane protein that belongs to the 3-O-sulfotransferases family. These proteins catalyze the addition of sulfate groups at the 3-OH position of glucosamine in heparan sulfate. The substrate specificity of individual members of the family is based on prior modification of the heparan sulfate chain, thus allowing different members of the family to generate binding sites for different proteins on the same heparan sulfate chain. Following treatment with a histone deacetylase inhibitor, expression of this gene is activated in a pancreatic cell line. The increased expression results in promotion of the epithelial-mesenchymal transition. In addition, the modification catalyzed by this protein allows herpes simplex virus membrane fusion and penetration. A very closely related homolog with an almost identical sulfotransferase domain maps less than 1 Mb away. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]