

## Product datasheet for **RG218829**

### STT3B (NM\_178862) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	STT3B (NM_178862) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	STT3B
Synonyms:	CDG1X; SIMP; STT3-B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RG218829 ORF sequence, **codon optimized**.  
**Due to the complexity of NM\_178862, the ORF clone is codon optimized for mammalian Expression.**  
**The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.**

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGC**C

ATGGCGGAGCCCTCGGCCCGGAGACAAAGCACAAGTCGTCCTCAACTCGTCCCCTGGAGTGGCCTCA  
 TGGCCCTGGGAAACAGCCGGCACGGCCACCACGGGCCCGGGCCAGTGCAGCACAAGCGCGGGCGG  
 CGCGGCCCGCCGAAGCCGGCCCGCGGGGCTGTCCGGGGGCTGTCCAGCCGGCTGGTGGCAGTCC  
 CTTCTCTCCTTACCATCTTCTTGGCTGGCTTGGCGGCTTCCAGCTCGCCCTTTCGCGCTATCC  
 GCTTCGAAAGCATCATCCACGAGTTCGACCCGTGGTTAACTATAGATCAACACATCATCTTGCATCTCA  
 TGGTTTCTATGAATTTTTAAATTGGTTTATGAAAGAGCATGGTATCCACTAGGAAGAATAGTAGGTGGT  
 ACTGTTTACCCAGGGTTGATGATAACCGCTGGCCTTATTCATTGGATTTTAAATACATTGAACATAACTG  
 TTCACATAAGAGACGTATGTGTTCCTTGCACCAACTTTTAGCGGCCTTACATCTATCTACTTTCCT  
 GCTTACAAGAGAACTTTGGAACCAAGGAGCAGGACTTTTAGTGTCTGTTTTATTGCTATTGTACCAGGC  
 TACATATCTCGGTAGTGTGGATCCTTTGATAATGAAGGCATTGCTATTTTTGCACCTCAGTTCACAT  
 ACTATTTATGGGTAATACTGTAAAACTGGGTGAGTCTTTTGGACAATGTGCTGCTGTATCTATCTATTT  
 TTAGTGTGCAGAGATACAGCAAAAGAGTCTACATAGCATATAGCACTTCTACATTGTGGTTTAAATAT  
 TATCAATGCAGATACCTTTTGTGGGATTCCAGCCAATCAGAACAAGTGAACACATGGCAGCTGCAGGTG  
 CTTTGCATTGCTGCAAGCTTATGCTTCTTGCAGTATCTGAGAGACCGATTAAACAAAACAAGAGTCCAG  
 ACCCTTTTCTTTTGGGTGTACTACTAGCTGCAGGTGCTGTTCCTTAGTGTCATCTATTTGACTTATA  
 CAGGTTACATTGCACCATGGAGTGGCAGGTTTTATTATTGTGGGATACTGGGTATGCAAAAATACACAT  
 TCCAATTATTGCATCAGTGTCTGAGCATCAACCTACGACTTGGGTGTCTTCTTCTTGTACTACATATT  
 CTCGTTTGTACTTTCCCGCAGGATTGTGGTCTGTATTAATAACATTAACGATGAGCGGTATTTGTGG  
 CACTGTACGCCATTAGCGCAGTCTATTTTGTGGTGTGATGGTCCGCCTCATGCTGACATTGACCCGGT  
 CGTTTGCATGCTCTCAGCTATTGCCTTCTAATGTGTTGAACATTATCTCGGAGATGACATGAAAAGA  
 GAAAACCCCCAGTTGAGGACTTCCGACGAGGATGACAAAAGAAACCAGGGTAACCTTTACGACAAGG  
 CCGGCAAGTTTCCGAAGCATGCTACAGAGCAAGAAAAACAGAGGAGGGGCTGGGGCCAAACATTAATC  
 AATAGTAACAATGCTGATGCTCATGCTGCTTATGATGTTCCGGTGCAGTGTACATGGGTGACATCTAAT  
 GCTTATTCTTCTCCTCAGTAGTCTTGGCATCCTATAACCATGATGGAACACGGAACATTCTTGATGACT  
 TCCGCGAGGCTTACTTCTGGTTGCGGCAAAATACGGACGAACACGCTCGGGTGTAGAGCTGGTGGGATTA  
 TGGATATCAAATCGCGGCATGGCTAATAGGACTACTCTTGTGATAATAACTTGAACAACCTCACAC  
 ATTGCATTGTGCGTAAGGCCATGAGTTCCAACGAGACGGCTGCATACAAAATCATGCAACACTGGATG  
 TTGATTACGTGCTGGTAATTTTTGGCGGAGTGTAGGATATTCTGGCGATGACATAAACAAGTTTCTGTG  
 GATGGTAAGGATTGCCGAGGGGAGCATCCCAAAGATATACGAGAAAGCGATTACTTTACCCACAAAGGA  
 GAATTCGCGTGGACAAAGCCGGCTCCCCTACTCTCTTGAATTGCCTGATGTACAAAATGAGCTATTATC  
 GATTTGGCGAAATGCAGCTCGATTTCAGAACACCCCGAGCTTTGATAGAACCAGGAAATGCAGAGATAGG  
 TAACAAAGATATTAATCAAGCACCTGGAAGAAGCGTTTACCTCTGAACACTGGTTGGTCCGAATTTAT  
 AAAGTCAAAGCTCCCGATAATCGCGAACTCTTGACCATAAACCAGGGTACTAATATATCCCAAAGC  
 AGAAATACCTTTCAAGAAAACAACAAAGAGGAAGAGAGGTTACATAAAAAATAAGCTCGTTTTCAAAA  
 GGTAAGAAGATCAGTAAGAAAACAGTC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

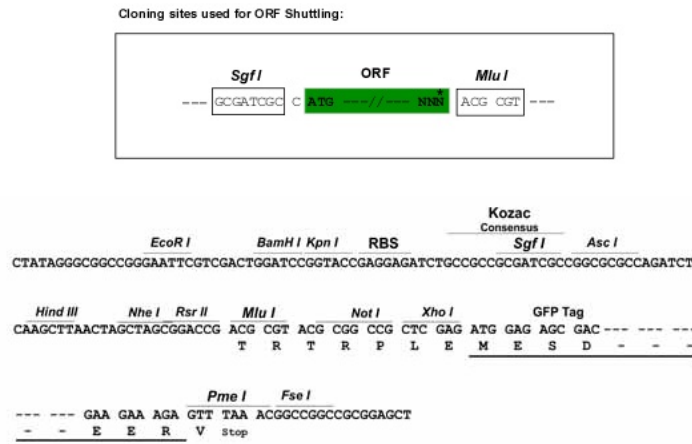
**Protein Sequence:** >RG218829 representing NM\_178862  
 Red=Cloning site Green=Tags(s)

MAEPSAPESKHKSSLNSSPWSGLMALGNSRHGHHGPGAQCAHKAAGGAAPPKPAPAGLSGGLSQPAGWQS  
 LLSFTILFLAWLAGFSSRLFAVIRFESIIEHFDWPNYRSTHHLASHGFYEFLNWFDERAWYPLGRIVGG  
 TVYPGLMITAGLIHWILNLTNITVHIRDVCVFLAPTFSGLTSTSTFLLTRELWNQAGLLAACFIAIVPG  
 YISRSVAGSFDNEGIAIFALQFTYYLWVKSVKGTGSVFWTMCCCLSYFYMVSAWGGYVFIINLIPLHVFL  
 LLMQRYSKRVYIAYSTFYIVGLILSMQIPFVGFQPIRTSEHMAAAGVFALLQAYAFLLQYLRDRLTKQEFQ  
 TLFFLGVSLAAGAVFLSVIYLYTYGYIAPWSGRFYSLWDTGYAKIHIPIIASVSEHQPTTWVSFFDLHI  
 LVCTFPAGLWFCIKNINDERVFVALYASAVYFAGVMVRLMLTLPVVCMLSAIAF SNVFEHYLGDDMKR  
 ENPPVEDSDEDDKRNQGNLYDKAGKVRKHATEQEKTEEGLGPNIKSIVTMLMLLMMFAVHCTWVTSN  
 AYSSPSVVLASYNHDGTRNILDDFREAYFWLRQNTDEHARVMSWWDYGYQIAGMANRTTLVDNNTWNNSH  
 IALVGKAMSSNETAAYKIMRTLDVDYVLFVGGVIGYSGDDINKFLWMVRIAEGEHPKDIRESDYFPPQG  
 EFRVDKAGSPTLLNCLMYKMSYRFGEMQLDFRTPPGFDRTRNAEIGNKDIKFKHLEEAFTSEHWLVRIY  
 KVKAPDNRETLDHKPRVTNIFPKQKYL SKKTTKRKRGYIKNKL VFKKGGKISKKT V

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_178862

**ORF Size:** 2478 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_178862.1](#), [NP\\_849193.1](#)

**RefSeq Size:** 4553 bp

**RefSeq ORF:** 2481 bp

**Locus ID:** 201595

**UniProt ID:** [Q8TCJ2](#)

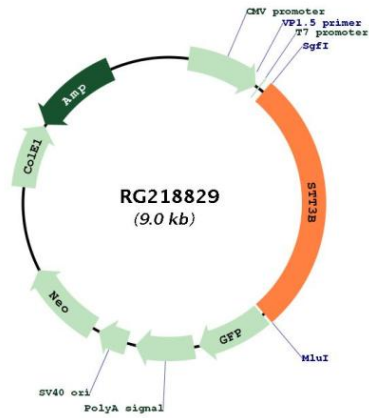
**Cytogenetics:** 3p23

**Protein Families:** Transmembrane

**Protein Pathways:** Metabolic pathways, N-Glycan biosynthesis

**Gene Summary:** The protein encoded by this gene is a catalytic subunit of a protein complex that transfers oligosaccharides onto asparagine residues. Defects in this gene are a cause of congenital disorder of glycosylation IX (CDG1X). [provided by RefSeq, Jun 2014]

Product images:



Circular map for RG218829