

Product datasheet for **RG232106**

ST3GAL3 (NM_001270463) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ST3GAL3 (NM_001270463) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ST3GAL3
Synonyms: DEE15; EIEE15; MRT12; SIAT6; ST3GALII; ST3Gal III; ST3GalIII; ST3N
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG232106 representing NM_001270463
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGACTCTTGGTATTTGTGCGCAATCTGCTGCTAGCCCTCTGCCTCTTTCTGGTACTGGGATTTTGT
ATTATTCTGCGTGAAGCTACACTTACTCCAGTGGGAGGAGACTCCAGTAAGTATAGTCACTCTAGCTC
ACCCAGGAGAAGCCTGTTGCAGAGTATGATCGGTTGGGCTTCTCCTGAATCTGGACTCTAACTGCCT
GCTGAATTAGCCACCAAGTACGCAAACCTTTTCAGAGGGAGCTTGAAGCCTGGCTATGCTTCAGCCTTGA
TGACGGCCATCTCCCCGGTTCTCCAAGCCAGCACCCATGTTCTCTGGATGACTCCTTTGCAAGTGGGC
TAGAATCCGGGAGTTCGTGCCGCTTTTGGGATCAAAGGTCAAAGACAATCTGATCAAAGCCATCTTGCA
GTCACCAAAGAGTACCGCTGACCCCTGCCTTGGACAGCCTCCGCTGCCGCCGCTGCATCATCGTGGCA
ATGGAGGCGTTCTTGCCAACAAGTCTCTGGGGTACGAATTGACGACTATGACATTGTGGTGTGAGTCTGG
ACGCACAATATCCAGCGAGAGAAAGAGTTTCTGCGGAAGCTGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG232106 representing NM_001270463
Red=Cloning site Green=Tags(s)

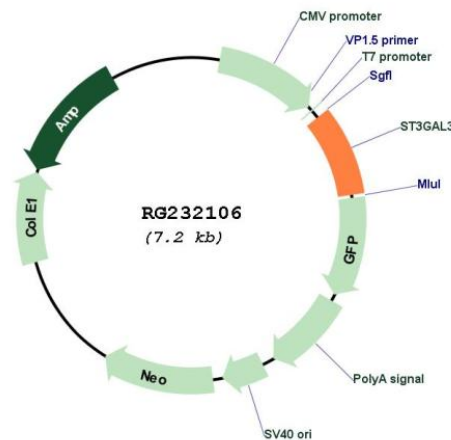
MGLLVFVRNLLLALCLFLVLGFLYYSAWKLHLLQWEEDSSKYSHSSSPQEKVPAEYDRLGFLNLDKLP
AELATKYANFSEGACKPGYASALMTAIFPRFSKPAPMFLDDFRKWARIREFVPPFGIKGQDNLKAILS
VTKEYRLTPALDSLRCRRCIIVNGGVLANKSLGSRIDDYDIVVSPGRTISSERKSFCGSW

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



Cloning Scheme:

Plasmid Map:


ACCN: NM_001270463

ORF Size: 603 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_001270463.3](#)

RefSeq Size: 1810 bp

RefSeq ORF: 606 bp

Locus ID: 6487

UniProt ID: [Q11203](#)

Cytogenetics: 1p34.1

Protein Families: Secreted Protein, Transmembrane

Protein Pathways: Glycosphingolipid biosynthesis - lacto and neolacto series, Keratan sulfate biosynthesis, Metabolic pathways

Gene Summary: The protein encoded by this gene is a type II membrane protein that catalyzes the transfer of sialic acid from CMP-sialic acid to galactose-containing substrates. The encoded protein is normally found in the Golgi apparatus but can be proteolytically processed to a soluble form. This protein is a member of glycosyltransferase family 29. Mutations in this gene have been associated with a form of autosomal recessive nonsyndromic cognitive disability as well as infantile epileptic encephalopathy. Multiple transcript variants encoding several different isoforms have been found for this gene. [provided by RefSeq, Jul 2017]