

Product datasheet for **SC322045**

ST3GAL3 (NM_006279) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ST3GAL3 (NM_006279) Human Untagged Clone
Tag:	Tag Free
Symbol:	ST3GAL3
Synonyms:	DEE15; EIEE15; MRT12; SIAT6; ST3GALII; ST3Gal III; ST3GalIII; ST3N
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF:

```
>OriGene sequence for SC322045
TATGGCGGCGCCCATGCAGCCAGCGCGTTGTGGGCTCCC GCCGGGGTCCCCCGCGGCTG
TCGCCCGCCGCTACGCCGCTGCCCTCCGCCTTCTGCCCGCGTCGGGCCGGGCGCCACCT
CCCCCTGCCTCCCTCTCCGCTGTGGTCATTTAGGAAATCGTAAATCATGTGAAGATGGG
ACTCTTGGTATTTGTGCGCAATCTGCTGCTAGCCCTCTGCCTCTTCTGGTACTGGGATT
TTTGTATTATTCTGCGTGAAGCTACACTTACTCCAGTGGGAGGAGGACTCCAATTCACT
GGTTCTTTCCTTTGACTCCGCTGGACAAACACTAGGCTCAGAGTATGATCGGTTGGGCTT
CCTCCTGAATCTGGACTCTAAACTGCCTGCTGAATTAGCCACCAAGTACGCAAACCTTTTC
AGAGGGAGCTTGAAGCCTGGCTATGCTTCAGCCTTGATGACGGCCATCTTCCCCCGGTT
CTCCAAGCCAGCACCCATGTTCTCGGATGACTCCTTTCGCAAGTGGGCTAGAATCCGGGA
GTTCTGTCGCCCTTTTGGGATCAAAGGTCAAGACAATCTGATCAAAGCCATCTTGTCACT
CACCAAAGAGTACCGCTGACCCCTGCCTTGGACAGCCTCCGCTGCCGCCGCTGCATCAT
CGTGGGCAATGGAGGCTTCTTGCCAACAAGTCTCTGGGGTACGAATTGACGACTATGA
CATTGTGGTGGAGTGAATTCAGCACCAGTGAAGGCTTTGAGAAGGACGTGGGCAGCAA
AACGACACTGCGCATCACCTACCCGAGGGCGCCATGCAGCGCCTGAGCAGTACGAGCG
CGATTCTCTTTGTCTCGCCGCTTCAAGTGGCAGGACTTTAAGTGGTTGAAATACAT
CGTCTACAAGGAGAGAGTGAAGTGCATCGGATGGCTTCTGGAAATCTGTGGCCACTCGAGT
GCCCAAGGAGCCCCCTGAGATTCGAATCCTCAACCCATATTTTCATCCAGGAGGCCGCTT
CACCCCTATTGGCCTGCCCTTCAACAATGGCCTCATGGGCCGGGGGAACATCCCTACCCT
TGGCAGTGTGGCAGTGCATGGCACTACACGGCTGTGACGAGGTGGCAGTGCAGGATT
TGGCTATGACATGAGCACACCCAACGCACCCCTGCACTACTATGAGACCGTTTCGCATGGC
AGCCATCAAAGACTCCTGGACGCACAATATCCAGCGAGAGAAAAGTTTCTGCGGAAGCT
GGTGAAAGCTCGCGTCATCACTGATCTAAGCAGTGGCATCTGAGTGGGCCAGCACATGG
CCATAGAGGCCCCAGGCACCAGGAGCAGCAGCCAGCACACCTACACAGGAGTCTTCA
GACCCAGAGAAGGACGGTGCCAAGGGCCCAAGGGCAGCAAGGCCTTGGTGGAGCAGCCA
GAGCTGTGCCTGCTCAGCAGCCAGTCTCAGAGACCAGCACTCAGCCTCATTGAGCATGGG
TCCTTGATGCCAGAGGGCCAGCAGGCTCCTGGCTGTGCCAGCAGGCCAGCATGCAGGT
GGTGGGACACTGGGCAGCAAGGCTGCTGCCGGAATCACTTCTCCAATCAGTGTGGTGT
ATTATCATTTTGTGAATTTGGGTAGGGGGGAGGGTAGGGATAATTTATTTTAAATAAGG
TTGGAGATGTCAAGTTGGGTTCACTTGCCATGCAGGAAGAGGCCCACTAGAGGGCCATC
AGGCAGTGTACCTGTTAGCTCCCTGTGGGGCAGGAGTGCAGGACCAGCCTGTACCTTG
CTGTGGGCTACAGGATGGTGGCAGGATCTAAGCCAGCCCCCTCCAGCTCATGACACT
GTTTGGCCTTTCTTGGGGAGAAGCGGGGTATTCCCACTCACCAGCCCTAGCTGTCCCAT
GGGGAAACCTGGAGCCATCCCTTCGGAGCCAACAAGACCGCCCCAGGGCTATAGCAGAA
AGAACTTTAAAGCTCAGGAGGGTGACGCCAGCTCCGCCTGTGGGAAGAGCTCCCTCC
ACAGCTGCAGCTGATGCATAGGACTACCGCAGGCCCGGACTCACCAACTTGCCACATGTT
CTAGGTTTCAGCAACAAGACTGCCAGGTGGTGGGTTCTGCCTTAGCCTGGACCAAAGG
GAAGTGAGGCCCAAGGAGCTTACCCAAGCTGTGGCAGCCGTCCCAGGCCACCCCATGGA
AGCAATAAAGCTTCCCTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
```

Restriction Sites:

Please inquire

ACCN:

NM_006279

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 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_006279.2](#), [NP_006270.1](#)

RefSeq Size: 2271 bp

RefSeq ORF: 1128 bp

Locus ID: 6487

UniProt ID: [Q11203](#)

Cytogenetics: 1p34.1

Domains: Glyco_transf_29

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]

Transcript Variant: This variant (10) has multiple differences in the coding region but maintains the reading frame compared to variant 1. The resulting isoform (j, also called B1) is shorter compared to isoform a.