

Product datasheet for RC221256

A4GNT (NM_016161) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	A4GNT (NM_016161) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	A4GNT
Synonyms:	alpha4GnT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221256 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGCGGAAGGAGCTCCAGCTCTCCCTGTCAGTCACCTTGCTGCTGTCTGTGGTTCCTCTACCAGTTCA
CCCTGAAGTCCAGCTGCCTCTTCTGCTTGCCTTTTCAAGTCCCACCAGGGGCTGGAAGCCCTCTGAG
CCACAGACGTGGCATTGTGTTTCTAGAGACCTCAGAGAGAATGGAGCCACCCATTTGGTCTCCTGTTCC
GTAGAGTCTGCTGCCAAGATTTATCCTGAGTGGCCTGTGGTGTCTTTATGAAGGGTCTTACTGATTCCA
CACCGATGCCCTCAAACCTCCACATACCCAGCTTTTTCCTTCTGTCAGCAATAGACAACGTTTTCTCTT
CCTTTTGGATATGAAAAGGCTGCTTGAAGACACACCATTGTTTTTCATGGTACAATCAAATCAACGCCAGC
GCAGAGAGAAACTGGCTCCACATCAGCTCGGATGCATCCCGCCTGGCCATCATCTGGAAATACGGTGGCA
TCTACATGGACACCGATGTCATCTCCATCAGGCCATCCCTGAGGAGAATTTTTGGCTGCGCAGGCTTC
TCGGTACTCTAGTAATGGAATAATTTGGGTTCTCCCCACCACCCTTTTTGTGGGAATGCATGGAAAAC
TTTGTGAACTATAATTCAGACATTTGGGGCAACCAAGGCCCTGAGTTGATGACAAGGATGTTGAGGG
TATGGTGTAACTTGAAGACTTCCAGGAGGTGAGCGACCTCAGGTGTCTGAACATATCCTTCTTACACCC
CCAAAGATTTTACCCATCTCTATCGAGAGTGGAGCGCTACTATGAAGTGTGGGATACAGAGCCAAGC
TTCAATGTCTTATGCCCTGCATTTGTGGAACCATGAACAGGAGGGGCGGGCTGTGATTAGAGGAA
GCAACACACTGGTGGAAAATCTCTATCGCAAGCACTGTCCAGGACTTACAGGGACCTGATTAAGGCC
AGAGGGTCACTGACTGGGGAGCTGGGTCCAGGTAACAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC221256 protein sequence
Red=Cloning site Green=Tags(s)

MRKELQLSLSVTL LVCGLYQFTLKSSCLFCLPSFKSHQGLEALLSHRRGIVFLETSERMEPPHLVSCS
 VESA AKIYPEWPVVF FMKGLT DSTPMP SNSTYP AF SFLSAIDNVFLP LDMKRLLED TPLFSWYNQINAS
 AERNWLH I SSDASRLAI IWKYGGIYMDTDVISIRPIEENFLAAQASRYSSNGIFGLPHHPFLWECMEN
 FVEHYNSDIWGNQGP ELMTRMLRVWCKLEDFQEVS DL RCLNIFLHPQRFPYISYREWRRYYEVDTEPS
 FNVSYALHLWNH MNQEGRAVIRG SNTLVENLYRKHCPRTYRDLIKGPEGSVTGELGPGNK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6443_e08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016161

ORF Size: 1020 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_016161.3](#)

RefSeq Size: 1771 bp

RefSeq ORF: 1023 bp

Locus ID: 51146

UniProt ID: [Q9UNA3](#)

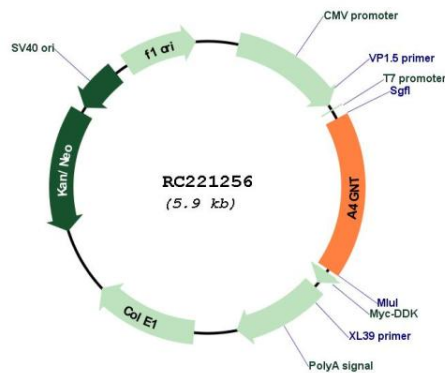
Cytogenetics: 3q22.3

Protein Families: Transmembrane

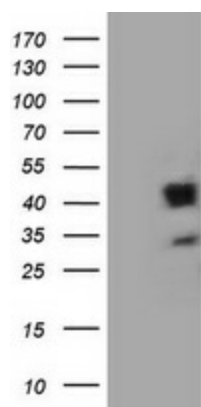
MW: 39.5 kDa

Gene Summary: This gene encodes a protein from the glycosyltransferase 32 family. The enzyme catalyzes the transfer of N-acetylglucosamine (GlcNAc) to core 2 branched O-glycans. It forms a unique glycan, GlcNAc α 1 \rightarrow 4Gal β \rightarrow R and is largely associated with the Golgi apparatus membrane. [provided by RefSeq, Jul 2008]

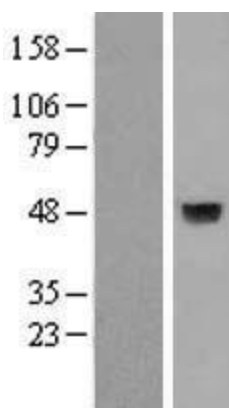
Product images:



Circular map for RC221256



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY A4GNT (Cat# RC221256, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-A4GNT(Cat# [TA800400]). Positive lysates [LY414153] (100ug) and [LC414153] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY414153]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221256 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).