

## Product datasheet for **RC227100**

### ALG5 (NM\_001142364) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ALG5 (NM_001142364) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ALG5
Synonyms:	bA421P11.2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC227100 representing NM_001142364 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTCCGTTCTGTTGCAGCTGGCGGTGCTCGGCGGGCGCTGGCGGCCGAGCCCTCGTACTGATTT  
CCATCGTTGCATTTACAACCTGCTACAAAATGCCAGCACTCCATCGACATGAAGAAGAGAAATCTTCTT  
AAATGCCAAAGGCCAGAAAGAACTTTACCCAGCATATGGGACTCACCTACCAACAACCTTCTGTCGTT  
GTGCCTTCATACAATGAAGAAAAACGGTTGCCTGTGATGATGGATGAAGCTCTGAGCTATCTAGAGAAGA  
GACAGAAATATGGAAGTGACAAAGTACGTGTGATAACCCTGGTGAAGAATCGTGGAAAAGGTGGAGCGAT  
TAGAATGGGTATATTCAGTTCTCGAGGAGAAAAGATCCTTATGGCAGATGCTGATGGAGCCACAAAGTTT  
CCAGATGTTGAGAAATTAGAAAAGGGGCTAAATGATCTACAGCCTTGGCCTAATCAAATGGCTATAGCAT  
GTGGATCTCGAGCTCATTTAGAAAAGAATCAATTGCTCAGCGTTCTTACTTCCGTACTCTTCTCATGTA  
TGGGTTCCACTTCTGGTGTGGTTCTTTGTGTCAAAGGAATCAGGGACACACAGTGTGGTTCAAATTA  
TTACTCGAGAAGCAGCTTACGGACGTTTTTCACTCTACACGTTGAACGATGGGCATTTGATGTAGAAC  
TACTGTACATAGCACAGTTCTTTAAAATCCAATAGCAGAAATGCTGTCAACTGGACAGAAATGAAGG  
TTCTAAATTAGTTCCATTCTGGAGCTGGCTACAAATGGGTAAGACCTACTTTTTATACGACTTCGATAT  
TTGACTGGTGCCTGGAGGCTTGAGCAAACCTCGAAAATGAAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC227100 representing NM\_001142364  
Red=Cloning site Green=Tags(s)

MAPLLLQLAVLGAALAAAALVLISIVAFTTATKMPALHRHEEEKFFLNAKGQKETLPSIWDSPTKQLSVV  
 VPSYNEEKRLPVMMDEALSYLEKRQKYGSDKVRVITLVKNRGGGAIKRMGIFSSRGEKILMADADGATKF  
 PDVEKLEKGLNDLQPWPNQMAIACGSRAHLEKESIAQRSYFRTLLMYGFHFLVWFLCVKGIKRDTCQGFKL  
 FTREASRTFSSLHVERWAFDVELLYIAQFFKIPIAEIAVNWTEIEGSKLVPFWSWLQMGKDLLFIRLRY  
 LTGAWRLEQTRKMN

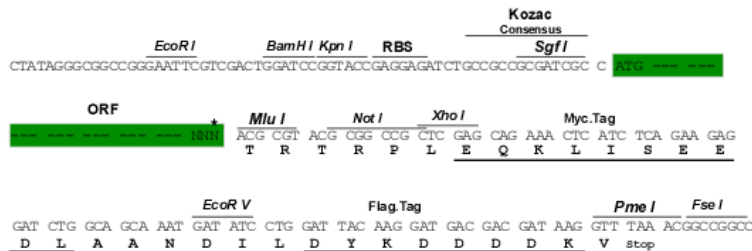
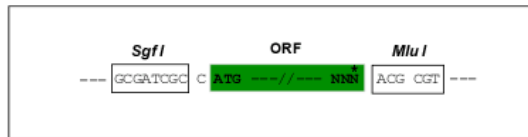
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8006\\_f01.zip](https://cdn.origene.com/chromatograms/mk8006_f01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001142364

**ORF Size:** 882 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\\_001142364.1](#), [NP\\_001135836.1](#)

**RefSeq ORF:** 885 bp

**Locus ID:** 29880

**UniProt ID:** [Q9Y673](#)

**Cytogenetics:** 13q13.3

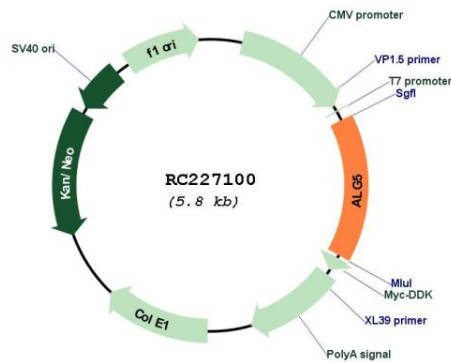
**Protein Families:** Transmembrane

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

**MW:** 33.3 kDa

**Gene Summary:** This gene encodes a member of the glycosyltransferase 2 family. The encoded protein participates in glucosylation of the oligomannose core in N-linked glycosylation of proteins. The addition of glucose residues to the oligomannose core is necessary to ensure substrate recognition, and therefore, effectual transfer of the oligomannose core to the nascent glycoproteins. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2008]

### Product images:



Circular map for RC227100