

Product datasheet for **RC200914**

ALG8 (NM_024079) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALG8 (NM_024079) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ALG8
Synonyms:	CDG1H; PCLD3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC200914 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGCGCTCACAAATGCCACGGGACTGGCAATTGGTTTTCGGCTTTGGCGCTCGGGGTGACTCTTC
 TCAATGCCTTCTCATCCCCACATACCATTCCACAGATTTTGAAGTACACCGAAACTGGCTTGTATCAC
 TCACAGTTTGCCAAATACACAGTGGTATTATGAGGCAACTTCAGAGTGGACGTTGGATTACCCCCCTTTC
 TTTGCATGGTTTGAGTATACCTGTCACATGTTGCCAAATATTTTATGATCAAGAAATGCTGAATGTCCATA
 ATTTGAATTACTCCAGCTCAAGGACCTTACTTTCCAGAGATTTCCGTCATCTTTATGGATGACTCTT
 TGTGTATGCTGTCGTGAGTGTGTAATGCATTGATGGAAAAAAGTGGGTAAGAAGTACAGAAAAAG
 CCAAAATTTATTCTGTCGGTATTACTTCTGTGAACTTCGGGTTATTAATTGTGGACCATATTCATTTTC
 AGTACAATGGCTTTTTATTTGGATTAATGCTACTCTCCATTGCACGATTATTTAGAAAAAGGCATATGGA
 AGGAGCATTTCTCTTTGCTGTTCTCTACATTTCAAGCATATCTACCTCTATGTAGCACCAGCTTATGGT
 GTATATCTGCTGCGATCCTACTGTTTCACTGCAAATAAACAGATGGGCTCTATTCGATGGAAGAGTTTCA
 GCTTTGTTGCTGTTATTTCCCTGGGACTGGTGTGTTTTCTAGTTTCTGCTCTTTCATTGGGTCTTTCTCT
 GGCCTTGAATCAGCTGCCTCAAGTCTTTTCCGACTCTTCTTTCAAGAGGGGCTCTGTGCATGCATAT
 TGGGCTCCAAACTTCTGGGCTTTGTACAATGCTTTGGACAAAGTGTGTCTGTATCGGTTTGAATTTGA
 AATTTCTTGATCCCAACAATATTTCCCAAGGCTCAATGACAAGTGGTTTGGTTTTCAGCAGTTCCAACACAC
 AGTCCTTCCCTCAGTGACTCCCTTGGCAACCCTCATCTGCACACTGATTGCCATATTGCCCTCTATTTTC
 TGTCTTTGGTTTAAACCCCAAGGGCCAGAGGCTTTCTCCGATGTCTAACTCTTTGTGCCTTTGAGCTCCT
 TTATGTTTGGGTGGCATGTTTCATGAAAAAGCCATACTTCTAGCAATTCTCCAATGAGCCTTTTGTCTGT
 GGGAAAAAGCAGGAGACGCTTCGATTTTCTGATTCTGACCACAACAGGACATTATCCCTCTTTCTCTCTG
 CTCTTCACTGCACCAGAACTTCCATTAAAATCTTACTCATGTTACTATTCACCATATATAGTATTTCTG
 CACTGAAGACTTTATTCAGAAAAGAAAAACCTCTTTTAAATTGGATGGAAACTTTCTACCTGCTTGGCCT
 GGGGCTCTGGAAGTCTGCTGTGAATTTGTATTCCCTTTCACCTCTGGAAGGTGAAGTACCCCTTCATC
 CCTTTGTTACTAACCTCAGTGTATTGTGCAGTAGGCGTCACATATGCTTGGTTCAAAGTGTATGTTTCAG
 TATTGATTGACTCTGCTATTGGCAAGACAAAGAAACAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200914 protein sequence
 Red=Cloning site Green=Tags(s)

MAALTIATGTGNWFSALALGVTLKCLLIPTYHSTDFEVHRNWLAIHSLPISQWYYEATSEWTLDYPPF
 FAWFEYILSHVAKYFDQEMLNHNLYSSRLLFQRFVIFMDVLFVYAVRECKCIDGKKGKELTEK
 PKFILSVLLLWNFGLLIVDHIHFQYNGFLFGLMLLSIARLFQKRHEGAFLLAVLLHFHXYLYVAPAYG
 VYLLRSYCFANKPDGSIKWSFSFVIRVLSLGLVVFLVSALSLGPFLALNQLPQVFSRFPFKRGLCHAY
 WAPNFWALYNALDKVLSVIGLKLKFLDPNNIPKASMTSGLVQQFQHTVLPVPLATLICTLIAILPSIF
 CLWFKPQGPGRFLRCLTLCALSSFMGWHVHEKAILLAILPMSLLSVGKAGDASIFLILTTTGHYSFLPL
 LFTAPELPIKILLMLLFTIYSISLKTFRKEKPLFNWMTFYLLGLPLEVCEVFVFPFTSWKVKYFPI
 PLLLTSVYCAVGVTYAWFKLYVSVLIDSAIGTKKKQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6401_b07.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_024079

ORF Size: 1578 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_024079.2](#)

RefSeq Size: 1668 bp

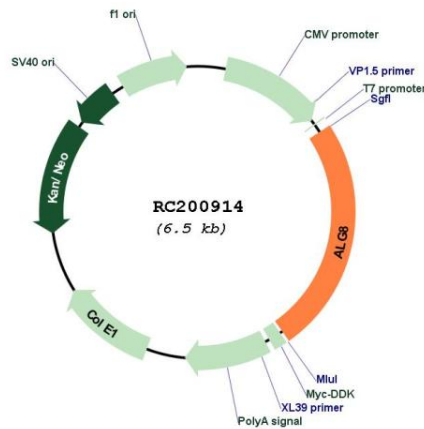
RefSeq ORF: 1581 bp

Locus ID: 79053

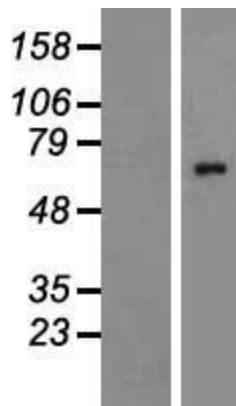
UniProt ID: [Q9BVK2](#)
Cytogenetics: 11q14.1
Domains: Alg6_Alg8
Protein Families: Transmembrane
Protein Pathways: Metabolic pathways, N-Glycan biosynthesis
MW: 60.1 kDa

Gene Summary: This gene encodes a member of the ALG6/ALG8 glucosyltransferase family. The encoded protein catalyzes the addition of the second glucose residue to the lipid-linked oligosaccharide precursor for N-linked glycosylation of proteins. Mutations in this gene have been associated with congenital disorder of glycosylation type 1h (CDG-1h). Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC200914



Western blot validation of overexpression lysate (Cat# [LY411335]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200914 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).