

Product datasheet for **RC220186**

Mannosidase II (MAN2A1) (NM_002372) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mannosidase II (MAN2A1) (NM_002372) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mannosidase II
Synonyms:	AMan II; GOLIM7; MANA2; MANII
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220186 representing NM_002372 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGTTAAGCCGCCAGTTCACCGTGTCGGCAGTGCATCTTCTGTGTGGTATTTCTCGCTCTACC
TGATGCTGGACCGGGTCACTTAGACTACCCAGGAACCCGCGCCGAGGGCTCCTCCCTCAGGGCCA
GCTCTCAATGTTGCAAGAAAAATAGACCAATTTGGAGCGTTTGCTAGCTGAGAATAATGAGATCATCTCA
AATATTAGAGACTCAGTCATCAATTTGAGTGAGTCTGTGGAGGATGGTCCGAAAAGTTACAAAAGCAATT
TCAGCCAAGGTGCTGGCTCACATCTTGCCTCACAAATTATCCCTCTCAGTTGACTGCAGACTGTCT
GTTTGCTTCAAAAGTGAAGTCAAAATCAGATGTGCAGATGTTGGATGTTTACAGTCTAATTTCTTTT
GACAATCCAGATGGTGGAGTTTGAAGCAAGGATTTGACATTACTTATGAATCTAATGAATGGGACTG
AACCCCTCAAGTCTTTGTGGTGCCTCATTCCATAACGACCCAGGTTGGTTGAAGACTTCAATGACTA
CTTTAGAGACAAGACTCAGTATATTTTTAATAACATGGTCTAAAGCTGAAAGAAGACTCACGGAGGAAG
TTATTTGGTCTGAGATCTTACCTTTCAAAGTGGTGGGATATTATAGATATTCAGAAGAAGGATGCTG
TAAAAGTTAATAGAAAATGGTCAGCTTGAATTTGTGACAGGTGGCTGGGTTATGCCTGATGAAGCTAC
TCCACATATTTTGCCTAATTTGATCAACTAATGAAGGACATCAGTGGCTGGAAAATAATATAGGAGTG
AAACCTCGTCCGGCTGGGCTATTGATCCCTTTGGACTCACCAACAATGGCTTATCTTAAACCGTG
CTGGACTTCTCACATGCTTATCCAGAGAGTTCATTATGCAGTTAAAAACAACCTTGCAGTGCATAAAAC
ATTGGAGTTTTTTGGAGACAGAATTGGGATCTGGGATCTGTACAGATATTTTATGCCACATGATGCC
TTCTACAGCTATGACATCCCTCACACTGTGGACCTGATCCTAAAATATGCTGCCAGTTTGAATTTAAAC
GTCTTCTGGAGGCAGATTTGGTTGTCCTGGGAGTCCCCCAGAAACAATACATCCTGGAAATGTCCA
AAGCAGGGCTCGGATGCTACTAGATCAGTACCGAAAGAAGTCAAAGCTTTTTCGAACCAAAGTTCTCCTG
GCTCCACTAGGAGATGATTTCCGCTACTGTGAATACACGGAATGGGATTTACAGTTAAGAATTATCAGC
AGCTTTTTGATTATGAATTCAGTCCAAGTTAAAGTTAAGATGCAGTTTGGAACTTTATCAGATTT
TTTTGATGCGCTGGATAAAGCAGATGAACTCAGAGAGACAAGGGCCAATCGATGTTCCCTGTTTTAAGT



[View online »](#)

GGAGATTTTTCACTTATGCCGATCGAGATGATCATTACTGGAGTGGCTATTTTACATCCAGACCCTTTT
ACAAACGAATGGACAGAATCATGGAATCTCATTTAAGGGCTGCTGAAATCTTTACTATTTCCGCCCTGAG
ACAAGCTCACAAATACAAGATAAATAAATTTCTCTCATCACTTTACACGGCACTGACAGAAGCCAGA
AGGAATTTGGGACTGTTTCAACATCATGATGCTATCACAGGAAGTCAAAAAGACTGGGTGGTTGTGGATT
ATGGTACCAGACTTTTTCACTCGTTAATGGTTTTGGAGAAGATAATTGAAAATCTGCATTTCTTCTTAT
TTTGAAGGACAACTCACATACGACTCTTACTCTCCTGATACCTTCTGGAGATGGATTTGAAACAAAA
TCACAAGATTCTCTGCCACAAAAAATAATAAGGCTGAGTGGGAGCCAAGGTACCTTGTGGTCTATA
ATCCTTTAGAACAAGACCGAATCTCGTTGGTCTCAGTCTATGTGAGTTCCCGACAGTGCAAGTGTCTC
TGCTTCAGGAAAACCTGTGGAAGTTCAAGTCAGCGCAGTTTGGGATACAGCAAATACTATTTTCAGAAACA
GCCTATGAGATCTTTTTCGAGCACATATACGCCATTGGGACTGAAAGTGATAAGATTTTGGAAATCAG
CAAGTTCAAATTCACATTTAGCTGATTATGTCTTGATAAGAATAAAGTAGAAGATAGCGGAATTTTTCAC
CATAAAGAATATGATAAATACTGAAGAAGGTATAACACTAGAGAAGTCTTTGTTTTACTTCGGTTTGTAT
CAAAGTGGACTTATGAAGCAAATGATGACTAAGAAGATGGTAAACACCATGAAGTAAATGTGCAATTTT
CATGGTATGGAACCACAATTAAGAGACAAAAGTGGTGCCTACCTCTTCTTACCTGATGGTAAATGCCAA
GCCTTATGTTTACACAACACCGCCTTTGTGAGAGTACACATGGAAGGATTTTTCGGAAGTACTTGC
TTTTTTGACCATGTTACTCATAGAGTCCGACTATACCACATACAGGGAATAGAAGGACAGTCTGTGGAAG
TTTCCAATATTGTGGACATCCGAAAAGTATATAACCGTGAGATTGCAATGAAAATTTCTTCTGATATAAA
AAGCCAAAATAGATTTTATACTGACCTAAATGGGTACCAGATTCAACCTAGAATGACACTGAGCAAATG
CCTCTTCAAGCAAATGTCTATCCCATGACCACAATGGCCTATATCCAGGATGCCAAACATCGTTTGACAC
TGCTCTCTGCTCAGTCTTTAGGGGTTTCGAGTTTGAATAGTGGTCAGATTGAAGTTATCATGGATCGAAG
ACTCATGCAAGATGATAATCGTGGCCTTGAGCAAGGTATCCAGGATAACAAGATTACAGCTAATCTATTT
CGAATACTACTAGAAAAAGAAGTGTGTTAATACGGAAGAAGAAAAGAAGTCGGTCAGTTATCCTTCTC
TCCTTAGCCACATAACTTCTTCTCATGAATCATCCAGTCATTCCAATGGCAAATAAGTTCTCCTCACC
TACCCTTGAGCTGCAAGGTGAATTCTCTCCATTACAGTCATCTTTGCCTTGTGACATTCATCTGGTTAAT
TTGAGAACAAATACAGTCAAAGGTGGGCAATGGGCACTCCAATGAGGCAGCCTTGATCCTCCACAGAAAAG
GGTTTGATTGTGCGTTCTCTAGCAAAGGCACAGGGCTGTTTTGTTCTACTACTCAGGAAAAGATATTGGT
ACAGAACTTTTAAACAAGTTTATTGTGCAAGTCTCACACCTTCATCACTATCCTTGATGCATTACCT
CCCGCACTCAGAATATAAGTGAGATCAACTTGAGTCCAATGGAATCAGCACATTCCGAATCCAGTTGA
GG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220186 representing NM_002372
 Red=Cloning site Green=Tags(s)

```

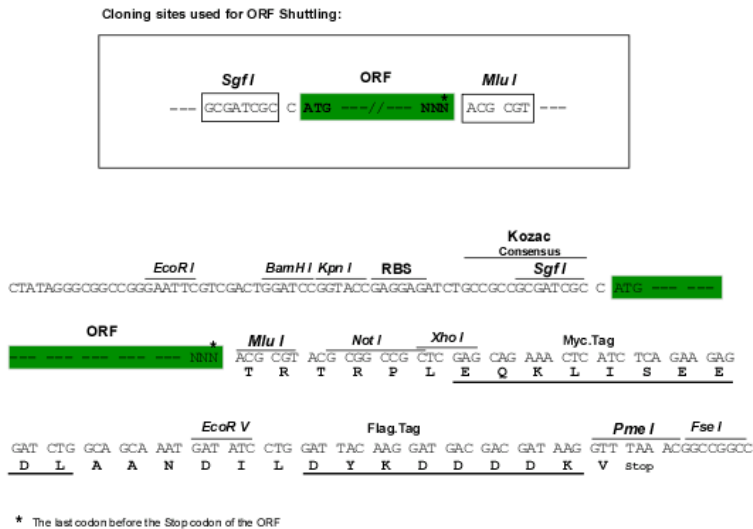
MKLSRQFTVFGSAIFCVVIFSLYLMLDRGHLDPYRNPREGSFPQGQLSMLQEKIDHLERLLAENNEIIS
NIRDVINLSESVEDGPKSSQSNFSQGAGSHLLPSQLSLSVDTADCLFASQSGSHNSDVQMLDVYSLISF
DNPDGGVWKQGFIDITYESNEWDTEPLQVFPVPHSHNDPGWLKTFNDYFRDKTQYIFNNMVLKLEDSSRRK
FIWSEISYLSKWWDIIDIQKDAVKSLIENGQLEIVTGGWVMPDEATPHYFALIDQLIEGHQWLENNIGV
KPRSGWAIDPFGHSPTMAYLLNRAGLSHMLIQRVHYAVKKHFALHKTLEFFWRQNWDLGSVTDILCHMMP
FYSYDIPHTCGPDPKICCOQDFKRLPGGRFGCPWGVPPETIHPGNVQSRARMLLDQYRKKSKLFRTRKVL
APLDGDFRYCEYTEWDLQFKNYQQLFDYMNSQSKFKVKMQFGTLDSDFFDALDKADETQRDKGQSMFVLS
GDFFTYADRDDHYWSGYFTSRPFYKRMDRIMESHLRAAEILYYFALRQAHKYKINKFLSSSLYTALTEAR
RNLGLFQHDAITGTAKDWVVVDYGRTRLFHSLMVLEKIIIGNSAFLLILKDKLTYDSYSPDTFLEMDLKQK
SQDSLPOQNIIRLSAEPHYLVVYNPLEQDRISLVSVVYSSPTVQVFSASGKPVVQVSAVWDTANTISSET
AYEISFRAHIPPLGLKVKIILESASSNSHLADYVLYKNKVEDSGIFTIKNMINTEEGITLENFVLLRFD
QTGLMKQMMTKEDGKHHEVNVQFSWYGTTIKRDKSGAYLFLPDGNAKPYVYVTPPFVVRVTHGRIYSEVTC
FFDHVTHRVRLYHIQGIEGQSVEVSNIVDIRKVNREIAMKISSDIKSQNRFYDNLNGYQIQPRMTL SKL
PLQANVYPMTTMAYIQDAKHLRLLSAQSLGVSSLSNGQIEVIMDRRLMQDDNRGLEQGIQDNKITANLF
RILLEKRSAVNTEEEKSVSYPSLLSHITSSLMNHPVIPMANKFSSTPLELQGEFSPQLSSLPDHLVN
LRTIQSKVGNHSNEAALILHRKGFDCRFSSKGTGLFCSTTQKILVQKLLNKFIVESLTPSSLMLMHP
PGTQNISEINLSPMEISTFRIQLR
    
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6259_d08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

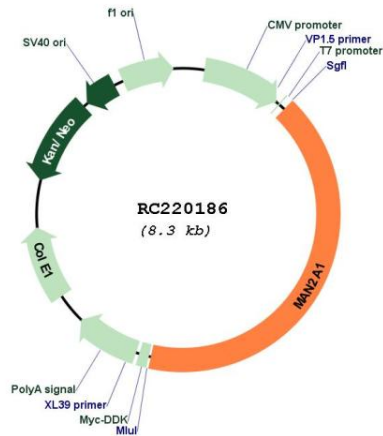


ACCN: NM_002372

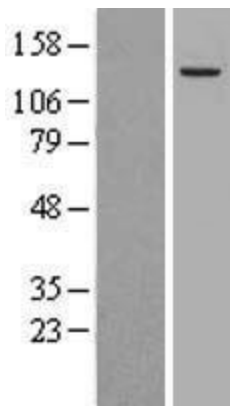
ORF Size: 3432 bp

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:	<ol style="list-style-type: none">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_002372.3
RefSeq Size:	5128 bp
RefSeq ORF:	3435 bp
Locus ID:	4124
UniProt ID:	Q16706
Cytogenetics:	5q21.3
Domains:	Glyco_hydro_38
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Metabolic pathways, N-Glycan biosynthesis
MW:	131 kDa
Gene Summary:	This gene encodes a glycosyl hydrolase that localizes to the Golgi and catalyzes the final hydrolytic step in the asparagine-linked oligosaccharide (N-glycan) maturation pathway. Mutations in the mouse homolog of this gene have been shown to cause a systemic autoimmune disease similar to human systemic lupus erythematosus. [provided by RefSeq, Dec 2013]

Product images:



Circular map for RC220186



Western blot validation of overexpression lysate (Cat# [LY419367]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220186 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).