

Product datasheet for **RG230616**

MAN2B1 (NM_001173498) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAN2B1 (NM_001173498) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MAN2B1
Synonyms:	LAMAN; MANB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG230616 representing NM_001173498 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGCGCCTACGCGGGGCTTCGGGGTCTGCGCTCGCGGTGCCTGGACTCAGCAGGCCCTGGACCA
TGTCCCGCGCCCTGCGGCCACCGCTCCCGCTCTCTGCTTTTTCCTTTTGTTGCTGGCGGTGCCGGTGC
TCGGGCCGGGGATACGAGACATGCCCCACAGTGCAGCCGAACATGCTGAACGTGCACCTGCTGCCTCAC
ACACATGATGACGTGGGCTGGCTAAAACCGTGGACCAGTACTTTTATGGAATCAAGAATGACATCCAGC
ACGCCGTGTGCAGTACATCCTGGACTCGGTATCTCTGCCTTGTGGCAGATCCACCCGTCGCTTCAT
TTACGTGGAGATTGCCTTCTTCCCGTTGGTGGCACCAGCAGACAAATGCCACACAGGAAGTCGTGCGA
GACCTTGTGCGCCAGGGGCGCCTGGAGTTCGCCAATGGTGGCTGGGTGATGAACGATGAGGCAGCCACCC
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 TTACCTTGAACCTGAGGGACCTGTTCTCCACCTTACCATCACCCGCTGCAGGAGACCACGCTGGTGGC
 CAACAGCTCCGCGAGGCAGCCTCCAGGCTCAAGTGGACAACAAACACAGGCCCCACACCCCACTAACT
 CCGTACCAGCTGGACCCGCCAACATCACGCTGGAACCCATGAAATCCGCACTTCTCTGGCCTCAGTTC
 AATGGAAGGAGGTGGATGTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG230616 representing NM_001173498
 Red=Cloning site Green=Tags(s)

MGAYARASGVCARGCLDSAGPWTMSRALRPPLPPLCFLLLLAAAGARAGGYETCPTVQPNNLNVHLLPH
 THDDVGWLKTVQYFYGIKNDIQHAGVQYILDSVISALLADPTRRFIYVEIAFFSRWWHQTNATQEVVR
 DLVRQGRLEFANGGWMMNDEAATHYGAIVDQMTLGLRFLEDTFGNDGRPRVAWHIDPFGHSREQASLFAQ
 MGFDFGFFGRLDYQDKWVRMQKLEMEQVWRASLKPPTADLFTGVLPNGYNPPRNLCDVLCVDQPLVE
 DPRSPEYNAKELVDYFLNVATAQGRYYRTNHTVMTMGSDFYENANMWFKNLDKLIRLVNAQAKGSSVHV
 LYSTPACYLWELNKANLTWSVKHDDFFPYADGPHQFWTGYFSSRPALKRYERLSYNFLQVCNQLEALVGL
 AANVGPYGSAGSAPLNEAMAVLQHHDVAVSGTSRQHVANDYARQLAAGWGPCEVLLSNALARLRGFKDHFT
 FCQQLNISICPLSQTAARFQIVYNPLGRKVNWMVRLPVSEGVFVVKDPNGRTVPDVIIFPSSDSQHP
 PELLFSASLPALGFSTYSVAQVPRWKPQARAPQIPRRSWSPALTIENEHIRATFDPTDGLLMEIMNMNQ
 QLLLQVQRQTFWYNASIGDNESDQASGAYIFRPNQKPLPVSRWAQIHLVKTPLVQEVHQNFSAWCSQVV
 RLYPGQRHLELEWSVGPYPVGDWTGKEVISRFDTPLETKGRFYTDSNGREILERRRDYRPTWKLNTPEV
 AGNYYPVNTRIYITDGNMQLTVLTDRSQGSSLRDGSLELMVHRRLLKDDGRGVSEPLMENGSGAWVRGR
 HLVLDDTAQAAAAGHRLLAEQEVLAPQVVLAPGGGAAYNLGAPPRTQFSGLRRLDPPSVHLLTLASWGPE
 MVLLRLEHQFVGEDSGRNL SAPVTLNLRDLFSTFTITRLQETTLVANQLREAASRLKWTNTGTPHQ
 PYQLDPANITLPEMERTFLASVQWKEVDG

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

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:	<u>NM_001173498.1</u> , <u>NP_001166969.1</u>
RefSeq Size:	3239 bp
RefSeq ORF:	3033 bp
Locus ID:	4125
UniProt ID:	<u>O00754</u>
Cytogenetics:	19p13.13
Protein Families:	Druggable Genome
Protein Pathways:	Lysosome, Other glycan degradation
Gene Summary:	This gene encodes an enzyme that hydrolyzes terminal, non-reducing alpha-D-mannose residues in alpha-D-mannosides. Its activity is necessary for the catabolism of N-linked carbohydrates released during glycoprotein turnover and it is member of family 38 of glycosyl hydrolases. The full length protein is processed in two steps. First, a 49 aa leader sequence is cleaved off and the remainder of the protein is processed into 3 peptides of 70 kDa, 42 kDa (D) and 13/15 kDa (E). Next, the 70 kDa peptide is further processed into three peptides (A, B and C). The A, B and C peptides are disulfide-linked. Defects in this gene have been associated with lysosomal alpha-mannosidosis. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Mar 2010]