

Product datasheet for **MG202161**

Mnd1 (NM_029797) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Tag: TurboGFP
Symbol: Mnd1
Synonyms: 2610034E18Rik; AI591601; Gaj
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >MG202161 representing NM_029797
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGTCAAAGAAAAGAGGACTGAGTGGGGAGGAAAAGAGAACCCGGATGATGGAGATATTTTTGAGACAA
AAGATGTATTCAGCTGAAAGACCTGGAGAAGCTCGCTCCCAAAGAGAAAGGCATAACCGCCATGTCAGT
GAAGGAAGTCCTTCAGAGCCTAGTGGATGATGGTATGGTTGACTGTGAGAGGATCGGGACGTCCAATTAC
TATTGGGCTTTCCGAGCAAGGCTCTTCATGCCAGGAAGCGCAAGTTGGAGGCTCTGAACCTCAGCTGT
CAGAGGGAAGCCAGAAGCATGCAGACTTACAGAAGAGCATTGAGAAAGCAAGAGTTGGCCGGCAAGAGAC
GGAAGAACGAGCCATGCTTGCAAAAAGAACTTTCTTCATTTGAGACCAAAGGCAACAACCTTAAGGCGAAA
GTGGAAAAATATCGAGAATGTGACCCACAGGTTGTGGAAGAGATACGTGAAGCAAATAAAGTAGCTAAAG
AAGCCGCAATCGATGGACTGATAACATATTTGCAATAAAATCCTGGCCAAAAGAAAATTTGGGTTTGA
AGAAAGTAAAATTGATAAAAACCTTTGGAATTCAGAAGACTTTGACTACATAGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG202161 representing NM_029797
Red=Cloning site Green=Tags(s)

MSKKRGLSGEEKRTRMMEIFFETKDVFLKDLKLEKLPKEKGITAMSVKEVLQSLVDDGMVDCERIGTSNY
YWAFPSKALHARKRKLEALNSQLSEGSQKHADLQKSIKARVGRQETEERAMLAKELSSFRDQRQLKAE
VEKYRECDPQVVEEIREANKVAKEAANRWTDNIFAIAKSWAKRKFGEESKIDKNFGIPEDFDYID

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:


ACCN: NM_029797

ORF Size: 615 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_029797.1](#), [NP_084073.1](#)

RefSeq Size: 784 bp

RefSeq ORF: 618 bp

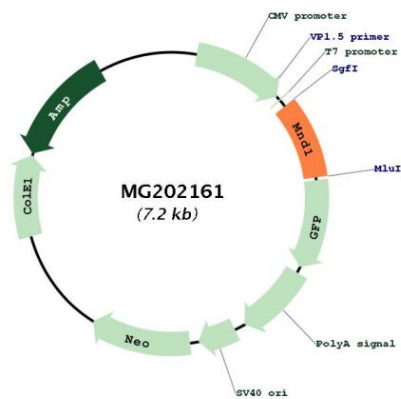
Locus ID: 76915

UniProt ID: [Q8K396](#)

Cytogenetics: 3 F1

Gene Summary: Required for proper homologous chromosome pairing and efficient cross-over and intragenic recombination during meiosis. Stimulates both DMC1- and RAD51-mediated homologous strand assimilation, which is required for the resolution of meiotic double-strand breaks. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG202161