

## Product datasheet for **RC205713**

### GAJ (MND1) (NM\_032117) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GAJ (MND1) (NM_032117) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GAJ
Synonyms:	GAJ
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205713 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCAAAGAAAAAGGACTGAGTGCAGAAGAAAAGAACTCGCATGATGGAAATATTTTCTGAAACAA  
AAGATGTATTTCAATTAAGAGCTTGGAGAAGATTGCTCCAAAGAGAAAGGCATTACTGCTATGTCAGT  
AAAAGAAGTCCTCAAAGCTTAGTTGATGATGGTATGGTTGACTGTGAGAGGATCGGAACCTCTAATTAT  
TATTGGGCTTTTCCAAGTAAAGCTTTCATGCAAGGAAACATAAGTTGGAGGTTCTGGAATCTCAGTTGT  
CTGAGGGAAGTCAAAGCATGCAAGCCTACAGAAAAGCATTGAGAAAGCTAAAATTGGCCGATGTGAAAC  
GGAAGAGCGAACCAGGCTAGCAAAGAGCTTCTTCACTTCGAGACCAAAGGGAACAGCTAAAGGCAGAA  
GTAGAAAAATACAAAGACTGTGATCCGCAAGTTGTGGAAGAAATACGCCAAGCAAATAAAGTAGCCAAAG  
AAGCTGCTAACAGATGGACTGATAACATATTCGCAATAAAATCTTGGGCCAAAAGAAAAATTTGGGTTTGA  
AGAAAAATAAATTTGATAGAACTTTTGAATCCAGAAGACTTTGACTACATAGAC

AG**CGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC205713 protein sequence Red=Cloning site Green=Tags(s)
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MSKKKGLSAEEKRTRMMEIFSETKDVFQLKDLEKIAPKEKGITAMSVKEVLQSLVDDGMVDCERIGTSNY  
YWAFPSKALHARKHKLELVESQLSEGSQKHASLQKSIEKAKIGRCETEERTRLAKELSSLRDQREQLKAE  
VEKYKDCDPQVVEEIRQANKVAKEAANRWDNIFAIKSWAKRKFGEENKIDRTFGIPEDFDYID

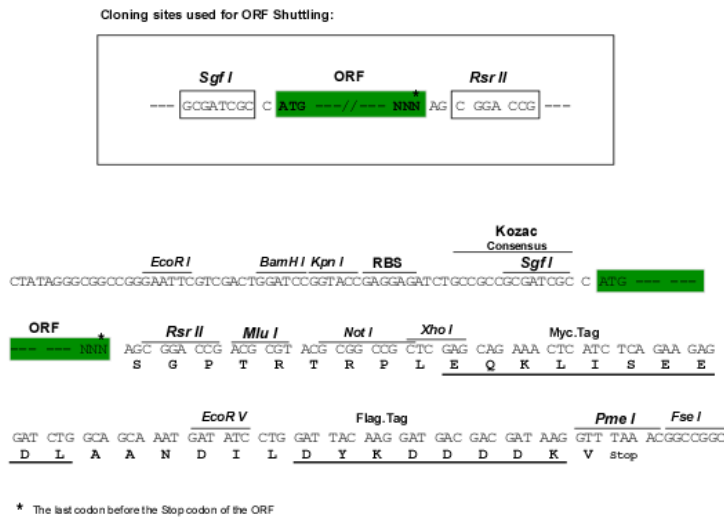
**SGP**TRTRPLEQKLISEEDLAANDILDYKDDDDKV



**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6615\\_c06.zip](https://cdn.origene.com/chromatograms/mk6615_c06.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_032117

**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.

**RefSeq:** [NM\\_032117.4](#)

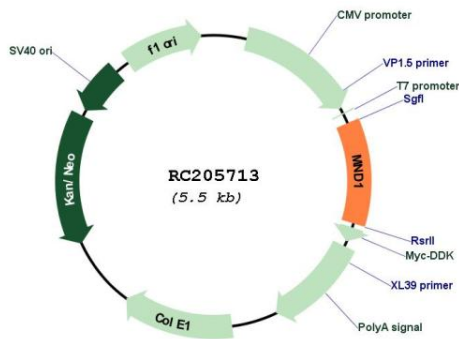
**RefSeq Size:** 945 bp

**RefSeq ORF:** 618 bp

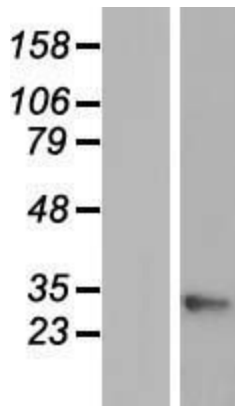
**Locus ID:** 84057

**UniProt ID:** [Q9BWT6](#)  
**Cytogenetics:** 4q31.3  
**Domains:** Mnd1  
**Protein Families:** Druggable Genome  
**MW:** 23.8 kDa  
**Gene Summary:** The product of the MND1 gene associates with HOP2 (MIM 608665) to form a stable heterodimeric complex that binds DNA and stimulates the recombinase activity of RAD51 (MIM 179617) and DMC1 (MIM 602721) (Chi et al., 2007 [PubMed 17639080]). Both the MND1 and HOP2 genes are indispensable for meiotic recombination.[supplied by OMIM, Mar 2008]

**Product images:**



Circular map for RC205713



Western blot validation of overexpression lysate (Cat# [LY410313]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205713 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).