

## Product datasheet for RC218026

### GANP (MCM3AP) (NM\_003906) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GANP (MCM3AP) (NM_003906) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GANP
Synonyms:	GANP; MAP80; PNRIID; SAC3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218026 representing NM_003906 Red=Cloning site Blue=ORF Green=Tags(s)

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ATGAACCAACTAATCCTTTTCAGTGGGCAGCAGCCTAGTGCTTTTTCGGCGTCTTCTAGTAATGTAGGAA  
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**Protein Sequence:**

>RC218026 representing NM\_003906

Red=Cloning site Green=Tags(s)

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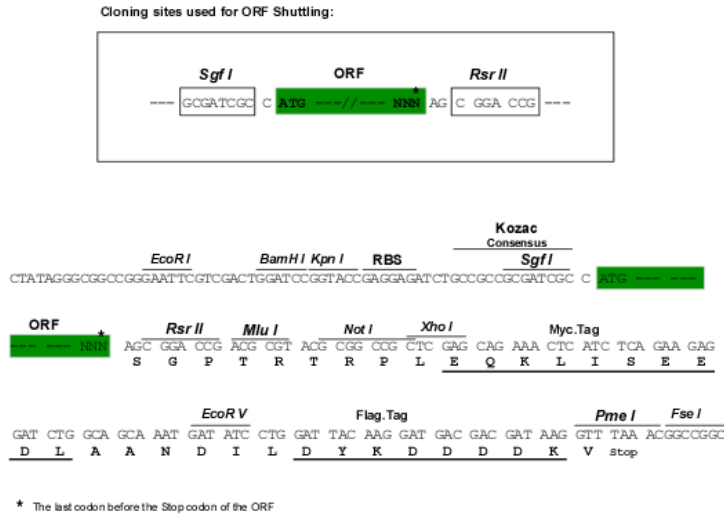
SGPTRRRLQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg4912\\_b01.zip](https://cdn.origene.com/chromatograms/mg4912_b01.zip)

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM\_003906

ORF Size: 5949 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\\_003906.5](#)

RefSeq Size: 6113 bp

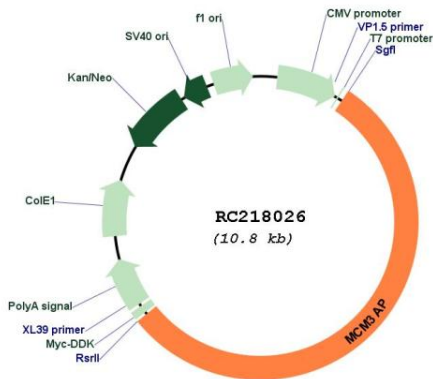
RefSeq ORF: 5943 bp

Locus ID: 8888

**UniProt ID:** [O60318](#)  
**Cytogenetics:** 21q22.3  
**Domains:** SAC3\_GANP  
**MW:** 218.2 kDa

**Gene Summary:** The minichromosome maintenance protein 3 (MCM3) is one of the MCM proteins essential for the initiation of DNA replication. The protein encoded by this gene is a MCM3 binding protein. It was reported to have phosphorylation-dependent DNA-primase activity, which was up-regulated in antigen immunization induced germinal center. This protein was demonstrated to be an acetyltransferase that acetylates MCM3 and plays a role in DNA replication. The mutagenesis of a nuclear localization signal of MCM3 affects the binding of this protein with MCM3, suggesting that this protein may also facilitate MCM3 nuclear localization. This gene is expressed in the brain or in neuronal tissue. An allelic variant encoding amino acid Lys at 915, instead of conserved Glu, has been identified in patients with mild intellectual disability. [provided by RefSeq, Jan 2014]

**Product images:**



Circular map for RC218026