

Product datasheet for **RR203870**

Mapre3 (NM_001007656) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mapre3 (NM_001007656) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mapre3
Synonyms:	MGC94312
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RR203870 representing NM_001007656 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGTCAATGTGTACTCCACTTCTGTGACCAGTGAGAATCTGAGTCGCCATGATATGCTTGCCTGGG
TCAATGACTCTCTGCACCTCAATTATACCAAGATCGAACAGCTCTGTTCAGGGGCAGCCTACTGCCAGTT
CATGGACATGCTTCCCTGGTTGCGTGCCTTGAGGAAGGTCAAGTCCAGGCCAAGCTAGAACATGAG
TACATCCACAACCTCAAGGTGCTGCAAGCAGCTTCAAGAAGATGGGTGGACAAAATCATTCCCGTAG
AGAAATTAGTGAAGGAAAATCCAAGATAATTTGAGTTTATTAGTGGTTAAGAAATCTTTGACGC
AAACTATGATGGAAAGGATTACAACCTCTGCTGGCGCGGAGGGCCAGGACGTAGCACCACCTCCTAAC
CCAGGTGATCAGATCTTCAACAAATCCAAGAACTCATTGGCACAGCAGTTCCACAGAGGACGTCCCCCA
CAGGCCCAAGAACATGCAAACCTCTGGCCGACTCAGTAACGTAGCTCCACCCTGCATCCTCCGGAAGAA
TCCCCCTCAGCCCGAAACGGTGGCCA TGAGGCTGATGCCAGATTCTTGAACTCAACCAGCAGCTGCTG
GACTTGAAGCTGACCGTAGATGGGCTGGAGAAAGAACGGGATTTCTATTTAGCAAAATGCGAGACATCG
AGCTGATCTGCCAGGAACATGAAAGTGAGAACAGCCCTGTCATCTCGGCCATCATTGGCATTCTCTATGC
CACGGAGGAGGGATTTGCACCCCTGAGGATGATGAGATTGAAGAACACCAACAGGAAGACCAGGACGAG
TAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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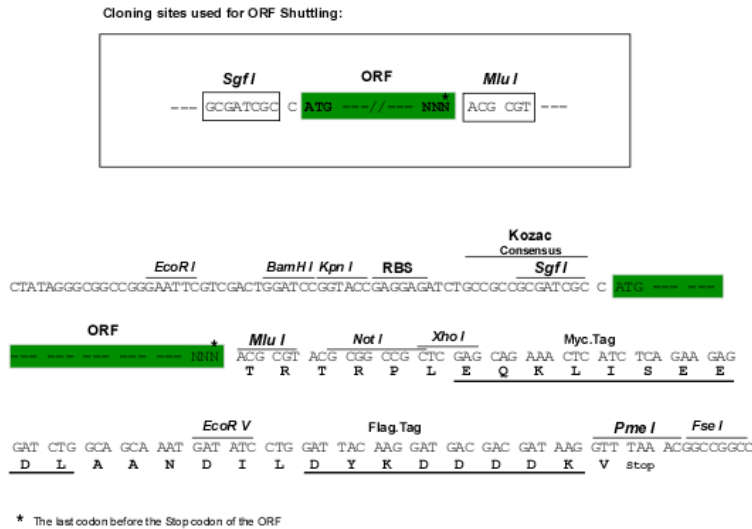
Protein Sequence: >RR203870 representing NM_001007656
Red=Cloning site Green=Tags(s)

MAVNVYSTSVTSENL SRHDLAWVNDLHLNYTKIEQLCSGAAYCQFMDMLFPGCVHLRKYKFKAKLEHE
 YIHNFKVLQAFAFKMGVDKIIIPVEKLVKGFQDNFEEIQWFKFFDANYDGKDYNPLLARQGQDVAPPPN
 PGDQIFNKSKKLIGTAVPQRTSPTGPKNQTSGRLSNVAPPICILRKNPPSARNGGHEADAQILELNQQLL
 DLKLTVDGLEKERDFYFSKLRDIELICQEHESNSPVISGIIGILYATEEGFAPPEDDEIEEHQEDQDE
 Y

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001007656

ORF Size: 843 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_001007656.1](#), [NP_001007657.1](#)

RefSeq Size: 1845 bp

RefSeq ORF: 846 bp

Locus ID: 298848

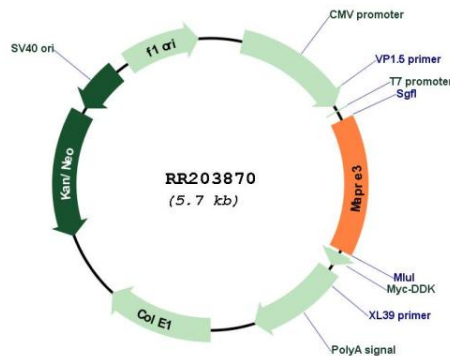
UniProt ID: [Q5XIT1](#)

Cytogenetics: 6q14

MW: 32 kDa

Gene Summary: Plus-end tracking protein (+TIP) that binds to the plus-end of microtubules and regulates the dynamics of the microtubule cytoskeleton. Promotes microtubule growth. May be involved in spindle function by stabilizing microtubules and anchoring them at centrosomes. Also acts as a regulator of minus-end microtubule organization: interacts with the complex formed by AKAP9 and PDE4DIP, leading to recruit CAMSAP2 to the Golgi apparatus, thereby tethering non-centrosomal minus-end microtubules to the Golgi, an important step for polarized cell movement. Promotes elongation of CAMSAP2-decorated microtubule stretches on the minus-end of microtubules (By similarity). May play a role in cell migration (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR203870