

Product datasheet for **RC210749**

MAPRE1 (NM_012325) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAPRE1 (NM_012325) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MAPRE1
Synonyms:	EB1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210749 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGTGAACGTATACTCAACGTCAGTGACCAGTGATAACCTAAGTCGACATGACATGCTGGCCTGGA
TCAATGAGTCTCTGCAGTTGAATCTGACAAAGATCGAACAGTTGTGCTCAGGGGCTGCGTATTGTCAGTT
TATGGACATGCTGTTCCCTGGCTCCATTGCCTGAAGAAAGTGAAATCCAAGCTAAGCTAGAACACGAG
TACATCCAGAACTTCAAATACTACAAGCAGGTTTTAAGAGAATGGGTGTTGACAAAATAATTCCTGTGG
ACAAATTAGTAAAGGAAAGTTTCAGGACAATTTGAATTCGTTCAAGAGTTTTCGATGC
AACTATGATGGAAGACTATGACCCTGTGGCTGCCAGACAAGGTCAAGAACTGCAGTGGCTCCTTCC
CTTGTTGCTCCAGCTCTGAATAAACCGAAGAACTCTCACTTCTAGCAGTGCAGTCCCCAGAGGCCCA
TCTCAACACAGAGAACCCTGCGGCTCCTAAGGCTGGCCCTGGTGTGGTGGCGAAAGAACCTGGTGTGGG
CAACGGAGACGACGAGGAGCTGAGTTGATGCAGCAGGTCAACGTATTGAACTTACTGTTGAAGACTTG
GAGAAAGAGAGGGATTTCTACTCGAAAGCTACGGAACATTGAATTGATTTGCCAGGAGAACGAGGGG
AAACGACCCTGTATTGCAGAGGATTGTAGACATTCTGTATGCCACAGATGAAGGCTTTGTGATACCTGA
TGAAGGGGGCCACAGGAGGAGCAAGAAGAGTAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC210749 protein sequence
 Red=Cloning site Green=Tags(s)

MAVNVYSTSVTSDNLSRHDMLAWINESLQLNLTKIEQLCSGAAYCQFMDMLFPGSIALKKVKFQAKLEHE
 YIQNFKILQAGFKRMGVDKIIPVDKLVGKGFQDNFEFVQWFKKFFDANYDGKDYPVAARQGOETAVAPS
 LVAPALNPKKPLTSSSAAPQRPISRTQRTAAAPKAGPGVVRKNPGVGNDDAAELMQQVNVKLKLTVEDL
 EKERDFYFGKLRNIELICQENEGENDPVLQRIVDILYATDEGFVIPDEGGPQEEQEEY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6192_a06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_012325

ORF Size: 804 bp

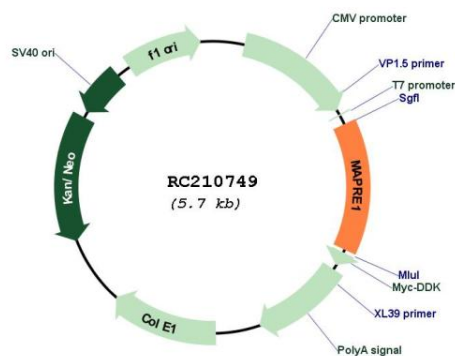
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

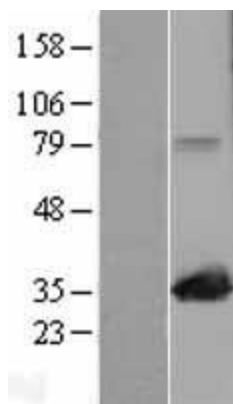
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_012325.3</u>
RefSeq Size:	2640 bp
RefSeq ORF:	807 bp
Locus ID:	22919
UniProt ID:	<u>Q15691</u>
Cytogenetics:	20q11.21
Domains:	CH, EB1
Protein Families:	Druggable Genome
MW:	30 kDa
Gene Summary:	<p>The protein encoded by this gene was first identified by its binding to the APC protein which is often mutated in familial and sporadic forms of colorectal cancer. This protein localizes to microtubules, especially the growing ends, in interphase cells. During mitosis, the protein is associated with the centrosomes and spindle microtubules. The protein also associates with components of the dynactin complex and the intermediate chain of cytoplasmic dynein. Because of these associations, it is thought that this protein is involved in the regulation of microtubule structures and chromosome stability. This gene is a member of the RP/EB family. [provided by RefSeq, Jul 2008]</p>

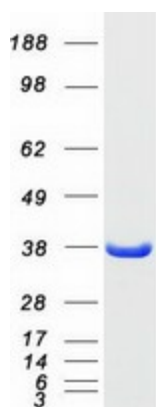
Product images:



Circular map for RC210749



Western blot validation of overexpression lysate (Cat# [LY402208]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210749 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAPRE1 protein (Cat# [TP310749]). The protein was produced from HEK293T cells transfected with MAPRE1 cDNA clone (Cat# RC210749) using MegaTran 2.0 (Cat# [TT210002]).