

Product datasheet for **RC226779**

EB2 (MAPRE2) (NM_001143827) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EB2 (MAPRE2) (NM_001143827) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EB2
Synonyms:	CSCSC2; EB1; EB2; RP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC226779 representing NM_001143827 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAACAGAACAGAGATCAAAAGTGTCTGTTCCAGAGGAACAGTTCATTTCAACAGCCAGGGAGAA
AGCCTGGATGCTCAAGTTGGGAATGGCGGTCAATGTGTATTCTACCTCGATAACCCAAGAGACTATGAG
CAGACATGACATCATTGCATGGGTTAATGACATAGTATCTTTAACTACACAAAAGTGAACAGCTTTGT
TCAGGAGCGGCCATTGCAATTCATGGACATGCTCTCCCTGGCTGCATTAGTTTGAAGAAAGTAAAT
TTCAAGCAAAGCTGGAACATGAATATATTCACAATTTTAACTTCTGCAAGCATCATTTAAGCGAATGAA
CGTTGATAAGGTAATCCAGTGGAGAAGCTAGTGAAGGACGTTTCCAGGACAACCTGGATTTTATTCAA
TGGTTTAAAGAAATCTATGATGCTAACTACGATGGGAAGGAGTATGATCCTGTAGAGGCACGACAAGGGC
AAGATGCAATTCCTCCTCCTGACCCTGGTGAACAGATCTTCAACCTGCCAAAAAGTCTCACCATGCAAA
CTCCCCACAGCAGGTGCAGCTAAATCAAGTCCAGCAGCTAAACCAGGATCCACACCTTCTCGACCCTCA
TCAGCCAAAAGGGCTTCTCCAGTGGCTCAGCATCCAAATCCGATAAAGATTTAGAAAACGAGGTACATC
AGCTTAATGAACAGGTACATTCATTAAGTGGCCTTGAAGGCGTGGAAAAGGAAAGGGATTTCTACTT
TGGGAAGTTGAGAGAGATCGAGCTACTTGCCAAGAACACGGGCAGGAAAATGATGACCTCGTGCAGAGA
CTAATGGACATCCTGTATGCTTCAGAAGAACACGAGGGCCACACAGAAGAGCCGGAAGCAGAGGAGCAAG
CCCACGAACAGCAGCCCCCGCAGCAGGAAGAGTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC226779 representing NM_001143827
Red=Cloning site Green=Tags(s)

MKQNRDQKCPVSQRNSSFQQPGRKPGCSSWGMVNVYSTSITQETMSRHDIIAWVNDIVSLNYTKVEQLC
 SGAAYCQFMDMLFPGCISLKKVKFQAKLEHEYIHNFKLLQASFKRMNVKVIIPVEKLVKGRFQDNLDFIQ
 WFKKFYDANYDGKEYDPVEARQGD AIPPPDPGEQIFNLPKSSHANSPTAGAAKSSPAKPGSTPSRPS
 SAKRASSSGSASKSDKDLETQVIQLNEQVHSLKLALLEGVEKERDFYFGKLR EIELLCQEHGQENDDLVQR
 LMDILYASEEHGHT EEP AEEQAHEQPPQEEY

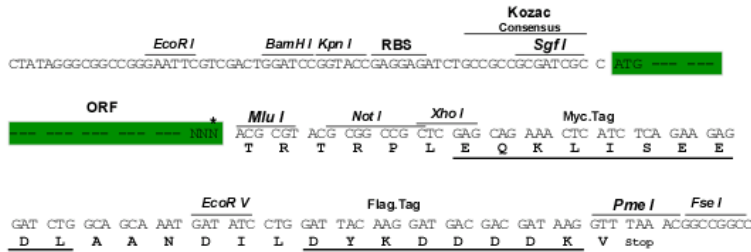
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8051_d04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001143827

ORF Size: 945 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_001143827.3](#)

RefSeq ORF: 948 bp

Locus ID: 10982

UniProt ID: [Q15555](#)

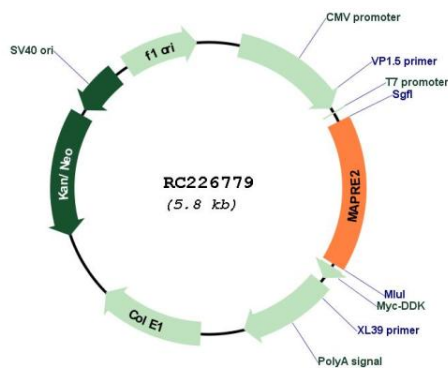
Cytogenetics: 18q12.1-q12.2

Protein Families: Druggable Genome

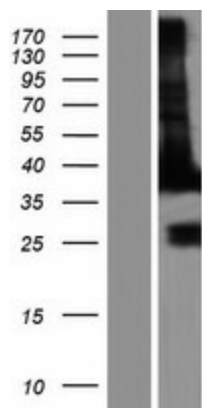
MW: 35.6 kDa

Gene Summary: The protein encoded by this gene shares significant homology to the adenomatous polyposis coli (APC) protein-binding EB1 gene family. This protein is a microtubule-associated protein that is necessary for spindle symmetry during mitosis. It is thought to play a role in the tumorigenesis of colorectal cancers and the proliferative control of normal cells. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jan 2012]

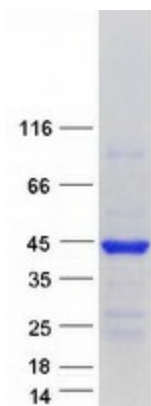
Product images:



Circular map for RC226779



Western blot validation of overexpression lysate (Cat# [LY428370]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226779 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAPRE2 protein (Cat# [TP326779]). The protein was produced from HEK293T cells transfected with MAPRE2 cDNA clone (Cat# RC226779) using MegaTran 2.0 (Cat# [TT210002]).