OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC204290

MMAB (NM_052845) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MMAB (NM_052845) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MMAB
Synonyms:	ATR; cblB; CFAP23; cob
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC204290 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGTGTGCGGCCTGGGGAGCCGTCTTGGCCTGGGGAGCCGTCTTGGCCTGCGCGGGTGCTTCGGCG
CCGCCAGGCTCCTGTATCCCCGTTTCCAGAGCCGCGGCCCTCAGGGCGTGGAAGACGGGGACAGGCCACA
GCCTTCCTCGAAGACACCCAGGATCCCCAAGATTTACACCAAAACGGGAGACAAAGGGTTTTCTAGTACC
TTCACAGGAGAAAGGAGACCCAAAGATGACCAAGTGTTTGAAGCCGTGGGAACTACAGATGAATTAAGTT
CAGCTATTGGGTTTGCTCTGGAATTAGTCACAGAAAAGGGCCATACATTTGCCGAAGAGCTTCAGAAAAT
CCAGTGCACATTGCAGGACGTCGGCTCGGCCCTGGCGACACCATGCTCCTCGGCCCGGGAGGCTCACTTA
AAGTATACCACGTTCAAGGCGGGGCCCATCCTGGAGCTGGAGCAGTGGATCGACAAGTACACCAGCCAGC
TCCCACCACTCACGGCCTTCATCCTGCCTTCGGGAGGCAAGATCAGCTCGGCGCTGCATTTCTGCCGGGC
CGTGTGCCGCCGGGCCGAGAGACGTGTGGTGCCTCTTGTCCAGATGGGAGAGACCGATGCGAACGTGGCC
AAGTTCTTAAACAGACTCAGTGACTATCTCTTCACGCTAGCCAGATATGCAGCCATGAAGGAGGGGAATC
AAGAGAAAATATACATGAAAAATGACCCATCGGCCGAGTCTGAGGGACTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC204290 protein sequence
Red=Cloning site Green=Tags(s)

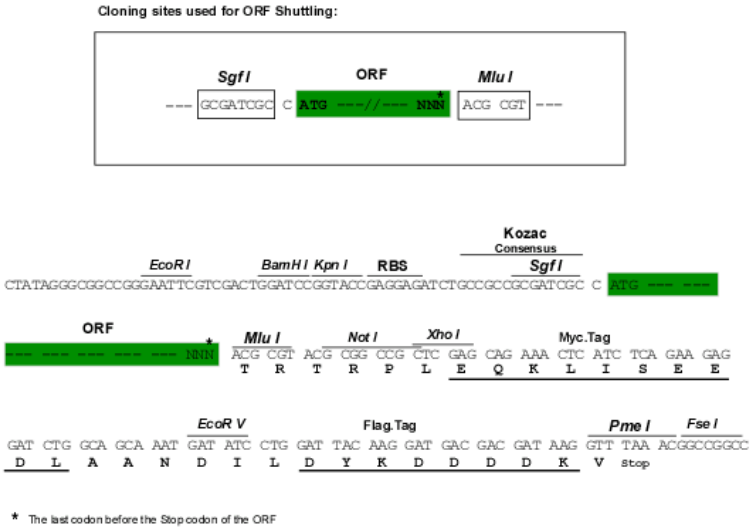
MAVCGLGSRLGLGSRLGLRGCFGAARLLYPRFQSRGPQGVEDGDRPQPSSKTPRIPKIYTKTGDKGFSST
FTGERRPKDDQVFEAVGTTDELSSAIGFALELVTEKGHTFAEELQKIQCTLQDVGSALATPCSSAREAHL
KYTTFKAGPILELEQWIDKYTSQLPPLTAFILPSGGKISSALHFCRAVCRRAERRVVPLVQMGETDANVA
KFLNRLSDYLFTLARYAAMKEGNQEKIYMKNDPSAESEGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6059_g12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_052845

ORF Size: 750 bp

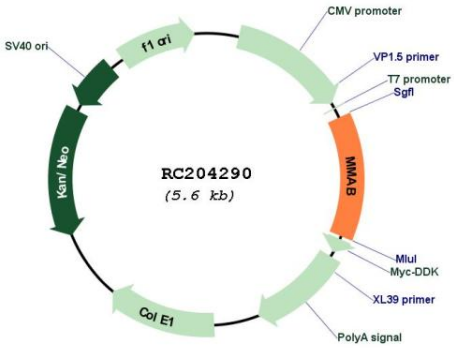
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

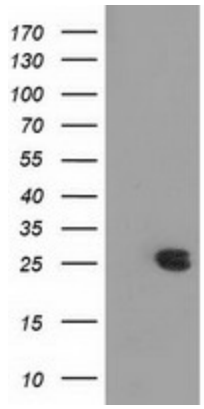
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_052845.4
RefSeq Size:	4154 bp
RefSeq ORF:	753 bp
Locus ID:	326625
UniProt ID:	Q96EY8
Cytogenetics:	12q24.11
Domains:	DUF80
Protein Pathways:	Metabolic pathways, Porphyrin and chlorophyll metabolism
MW:	27.4 kDa
Gene Summary:	This gene encodes a protein that catalyzes the final step in the conversion of vitamin B(12) into adenosylcobalamin (AdoCbl), a vitamin B12-containing coenzyme for methylmalonyl-CoA mutase. Mutations in the gene are the cause of vitamin B12-dependent methylmalonic aciduria linked to the cblB complementation group. Alternatively spliced transcript variants have been found. [provided by RefSeq, Apr 2011]

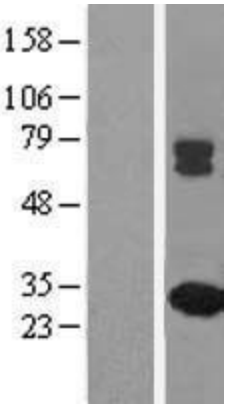
Product images:



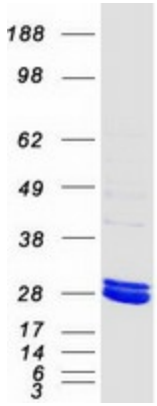
Circular map for RC204290



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MMAB (Cat# RC204290, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MMAB(Cat# [TA502178]). Positive lysates [LY409455] (100ug) and [LC409455] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY409455]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204290 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MMAB protein (Cat# [TP304290]). The protein was produced from HEK293T cells transfected with MMAB cDNA clone (Cat# RC204290) using MegaTran 2.0 (Cat# [TT210002]).