

## Product datasheet for RC204150

### EMAP II (AIMP1) (NM\_004757) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EMAP II (AIMP1) (NM_004757) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EMAP II
Synonyms:	EMAP2; EMAPII; HLD3; p43; SCYE1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204150 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGGCAAATAATGATGCTGTTCTGAAGAGACTGGAGCAGAAGGGTGCAGAGGCAGATCAAATCATTGAAT  
 ATCTTAAGCAGCAAGTTTCTCTACTTAAGGAGAAAGCAATTTGCAGGCAACTTTGAGGGAAGAGAAGAA  
 ACTTCGAGTTGAAAATGCTAACTGAAGAAAGAAATTGAAGAACTGAAACAAGAGCTAATTCAGGCAGAA  
 ATTCAAAATGGAGTGAAGCAAATACCATTTCATCTGGTACTCCACTGCACGCTAATTCATGGTTTCTG  
 AAAATGTGATACAGTCTACAGCAGTAACAACCGTATCTTCTGGTACCAAAGAACAGATAAAAGGAGGAAC  
 AGGAGACGAAAAGAAAGCGAAAGAGAAAATTGAAAAGAAAGGAGAGAAGAGAGAAAAACAGCAATCA  
 ATAGCTGGAAGTGCCGACTCTAAGCCAATAGATGTTTCCCGTCTGGATCTTCGAATTGGTTGCATCATAA  
 CTGCTAGAAAACACCCTGATGCAGATTCTTTGTATGTGGAAGAAGTAGATGTCGGAGAAATAGCCCCAAG  
 GACAGTTGTGAGTGGCCTGGTGAATCATGTTCTCTTGAACAGATGCAAAATCGGATGGTGATTTTACTT  
 TGTAACCTGAAACCTGCAAGATGAGGGGAGTATTATCTCAAGCAATGGTCATGTGTGCTAGTTCACCAG  
 AGAAAATTGAAATCTTGGCTCCTCCAAATGGGTCTGTTCTGGAGACAGAATTACTTTTGATGCTTTCCC  
 AGGAGAGCCTGACAAGGAGCTGAATCCTAAGAAGAAGATTGGGAGCAGATCCAGCCTGATCTTCACACT  
 AATGATGAGTGTGTGGCTACATACAAAGGAGTTCCTTTGAGGTGAAAGGAAGGAGATGTAGGGCTC  
 AAACCATGAGCAACAGTGAATCAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA


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**Protein Sequence:** >RC204150 protein sequence  
 Red=Cloning site Green=Tags(s)

MANNDAVLKRLEQKGAEADQIIIEYLKQVSLLEKAILQATLREEKKLRVENAKLKEIEELKQELIQAE  
 IQNGVKQIPFSGTPLHANSMVSENVISTAVTTVSSGTKEQIKGGTGDEKKAKEIEKKGEKKEKKQQS  
 IAGSADSKPIDVSRLDLRIGCIITARKHPDADSLYVEEVDVGEIAPRTTVSGLVNHVPLEQMQRNVILL  
 CNLKPAKMRGVL SQAMVMCASSPEKIEILAPPNGSVPGDRITFDAFPGEKELNPKKKIWEQIQPD LHT  
 NDECVATYKGVPEVKGKGVCR AQTMSNSGIK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6796\\_a06.zip](https://cdn.origene.com/chromatograms/mk6796_a06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_004757

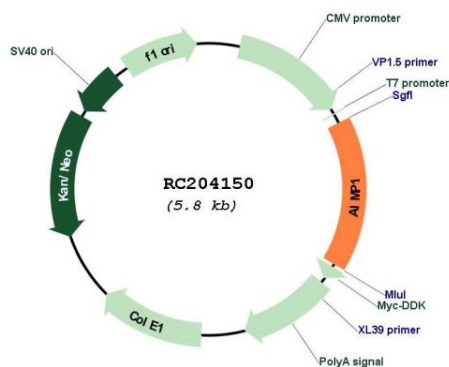
**ORF Size:** 936 bp

**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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

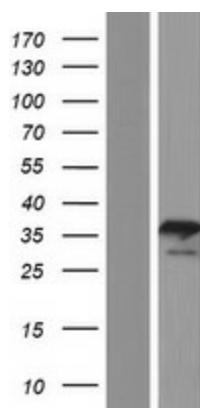
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_004757.3</a>
<b>RefSeq Size:</b>	3159 bp
<b>RefSeq ORF:</b>	939 bp
<b>Locus ID:</b>	9255
<b>UniProt ID:</b>	<a href="#">Q12904</a>
<b>Cytogenetics:</b>	4q24
<b>Domains:</b>	tRNA_bind
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	34.4 kDa
<b>Gene Summary:</b>	<p>The protein encoded by this gene is a cytokine that is specifically induced by apoptosis, and it is involved in the control of angiogenesis, inflammation, and wound healing. The release of this cytokine renders the tumor-associated vasculature sensitive to tumor necrosis factor. The precursor protein is identical to the p43 subunit, which is associated with the multi-tRNA synthetase complex, and it modulates aminoacylation activity of tRNA synthetase in normal cells. This protein is also involved in the stimulation of inflammatory responses after proteolytic cleavage in tumor cells. Multiple transcript variants encoding different isoforms have been found for this gene. A pseudogene has been identified on chromosome 20. [provided by RefSeq, Dec 2008]</p>

## Product images:



Circular map for RC204150



Western blot validation of overexpression lysate (Cat# [LY428077]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC226909] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).