

## Product datasheet for RC226909

### EMAP II (AIMP1) (NM\_001142415) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EMAP II (AIMP1) (NM_001142415) 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:	>RC226909 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAAATAATGATGCTGTTCTGAAGAGACTGGAGCAGAAGGGTGCAGAGGCAGATCAAATCATTGAAT  
ATCTTAAGCAGCAAGTTTCTCTACTTAAGGAGAAAGCAATTTTGCAGGCAACTTTGAGGGAAGAGAAGAA  
ACTTCGAGTTGAAAATGCTAAACTGAAGAAAGAAATTGAAGAAGTAAACAAGAGCTAATTCAGGCAGAA  
ATTCAAAATGGAGTGAAGCAAATACCATTCCATCTGGTACTCCACTGCACGCTAATTCTATGGTTTCTG  
AAAATGTGATACAGTCTACAGCAGTAACAACCGTATCTTCTGGTACCAAAGAACAGATAAAAGGAGGAAC  
AGGAGACGAAAAGAAAGCGAAAAGAGAAAATTGAAAAGAAAGGAGAGAAGAAGGAGAAAAAACAGCAATCA  
ATAGCTGGAAAGTCCCGACTCTAAGCCAATAGATGTTTCCCGTCTGGATCTTCGAATTGGTTGCATCATAA  
CTGCTAGAAAACACCCTGATGCAGATTCTTTGTATGTGGAAGAAGTAGATGTCGGAGAAATAGCCCCAAG  
GACAGTTGTCAAGTGGCCTGGTGAATCATGTTCTCTTGAACAGATGCAAAATCGGATGGTGAATTTACTT  
TGTAACCTGAAACCTGCAAAGATGAGGGGAGTATTATCTCAAGCAATGGTCATGTGTGCTAGTTCACCAG  
AGAAAATTGAAATCTTGGCTCCTCCAAATGGGTCTGTTCTGGAGACAGAATTACTTTTGATGCTTTCCC  
AGGAGAGCCTGACAAGGAGCTGAATCCTAAGAAGAAGATTTGGGAGCAGATCCAGCCTGATCTTCACACT  
AATGATGAGTGTGTGGCTACATACAAAGGAGTTCCTTTGAGGTGAAAGGAAGGAGTATGTAGGGCTC  
AAACCATGAGCAACAGTGAATCAAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC226909 protein sequence  
Red=Cloning site Green=Tags(s)

MANNDAVLKRLEQKGAEADQIEYLKQQVSLLEKAILQATLREEKLRVENAKLKEIEELKQELIQAE  
 IQNGVKQIPFPGTPLHANSMVSENVISQSTAVTTVSSGTKEQIKGGTGDEKKAKEIEKKGEKKKQQS  
 IAGSADSKPIDVSRDLRIGCIIITARKHPDADSLYVEEVDVGEIAPRTVVSGLVNHVPLEQMQRNVILL  
 CNLKPAMRGVLSQAMVMCASSPEKIEILAPPNGSVPGDRITFDAFPGEKELNPKKKIWEQIQPDLHT  
 NDECVATYKGVPFVKGKGVCRQAQTMNSGIK

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\_001142415

**ORF Size:** 936 bp

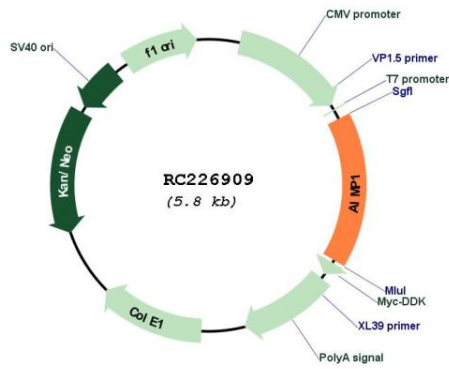
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone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

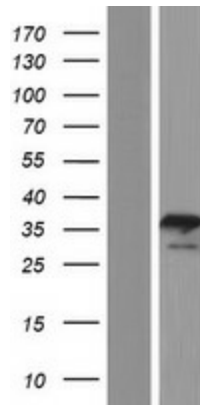
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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>RefSeq:</b>	<u>NM_001142415.1, NP_001135887.1</u>
<b>RefSeq Size:</b>	2537 bp
<b>RefSeq ORF:</b>	939 bp
<b>Locus ID:</b>	9255
<b>UniProt ID:</b>	<u>Q12904</u>
<b>Cytogenetics:</b>	4q24
<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 RC226909



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]).