

Product datasheet for RC227107

EMAP II (AIMP1) (NM_001142416) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EMAP II (AIMP1) (NM_001142416) 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:	>RC227107 representing NM_001142416 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAAATAATGATGCTGTTCTGAAGAGACTGGAGCAGAAGGGTGCAGAGGCAGATCAAATCATTGAAT
ATCTTAAGCAGCAAGTTTCTCTACTTAAGGAGAAAGCAATTTGCAGGCAACTTTGAGGGAAGAGAAGAA
ACTTCGAGTTGAAAATGCTAAACTGAAGAAAGAAATTGAAGAAGTAAACAAGAGCTAATTCAGGCAGAA
ATTCAAAATGGAGTGAAGCAAATACCATTTCCATCTGGTACTCCACTGCACGCTAATTCTATGGTTTCTG
AAAATGTGATACAGTCTACAGCAGTAACAACCGTATCTTCTGGTACCAAAGAACAGATAAAAAGGAGGAAC
AGGAGACGAAAAGAAAGCGAAAAGAGAAAATTGAAAAGAAAGGAGAGAAGAAGGAGAAAAAACAGCAATCA
ATAGCTGGAAGTGCCGACTCTAAGCCAATAGATGTTTTCCCGTCTGGATCTTCGAATTGGTTGCATCATAA
CTGCTAGAAAACACCCTGATGCAGATTCTTTGTATGTGGAAGAAGTAGATGTCGGAGAAATAGCCCCAAG
GACAGTTGTCAAGTGGCCTGGTGAATCATGTTCTCTTGAACAGATGCAAAATCGGATGGTGAATTTACTT
TGTAACCTGAAACCTGCAAAGATGAGGGGAGTATTATCTCAAGCAATGGTCATGTGTGCTAGTTCACCAG
AGAAAATTGAAATCTTGGCTCCTCCAAATGGGTCTGTTCTGGAGACAGAATTACTTTTGATGCTTTCCC
AGGAGAGCCTGACAAGGAGCTGAATCCTAAGAAGAAGATTTGGGAGCAGATCCAGCCTGATCTTCACACT
AATGATGAGTGTGTGGCTACATACAAAGGAGTTCCTTTGAGGTGAAAGGAAGGAGTATGTAGGGCTC
AAACCATGAGCAACAGTGAATCAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC227107 representing NM_001142416
Red=Cloning site Green=Tags(s)

MANNDAVLKRLEQKGAEADQIEYLKQQVSLLEKAILQATLREEKLRVENAKLKEIEELKQELIQAE
 IQNGVKQIPFPGTPLHANSMVSENVIQSTAVTTVSSGTKEQIKGGTGDEKKAKEIEKKGEKKEKKQS
 IAGSADSKPIDVSRDLRIGCIIITARKHPDADSLYVEEVDVGEIAPRTVVSGLVNHVPLEQMQRNVILL
 CNLKPAMRGVLSQAMVMCASSPEKIEILAPPNGSVPGDRITFDAFPGEKELNPKKKIWEQIQPDLHT
 NDECVATYKGVPFVKGKGVCRQAQTMNSGIK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1490_e11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001142416

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).

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_001142416.2](#)

RefSeq ORF: 939 bp

Locus ID: 9255

UniProt ID: [Q12904](#)

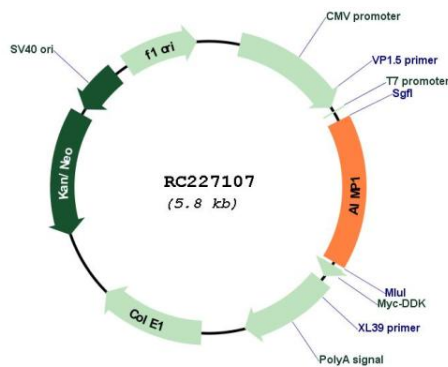
Cytogenetics: 4q24

Protein Families: Druggable Genome

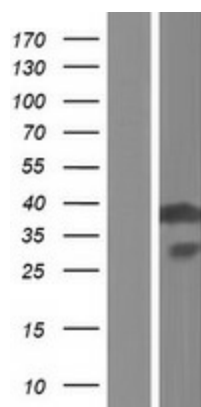
MW: 34.35 kDa

Gene Summary: 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]

Product images:



Circular map for RC227107



Western blot validation of overexpression lysate (Cat# [LY428078]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227107 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).