

Product datasheet for **RG227107**

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:	TurboGFP
Symbol:	AIMP1
Synonyms:	EMAP2; EMAPII; HLD3; p43; SCYE1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG227107 representing NM_001142416 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAAATAATGATGCTGTTCTGAAGAGACTGGAGCAGAAGGGTGCAGAGGCAGATCAAATCATTGAAT
ATCTTAAGCAGCAAGTTTCTCTACTTAAGGAGAAAGCAATTTGCAGGCAACTTTGAGGGAAGAGAAGAA
ACTTCGAGTTGAAAATGCTAAACTGAAGAAAGAAATTGAAGAAGTGAACAAGAGCTAATTCAGGCAGAA
ATTCAAAATGGAGTGAAGCAAATACCATTTCCATCTGGTACTCCACTGCACGCTAATTCTATGGTTTCTG
AAAATGTGATACAGTCTACAGCAGTAACAACCGTATCTTCTGGTACCAAAGAACAGATAAAAGGAGGAAC
AGGAGACGAAAAGAAAGCGAAAAGAGAAAATTGAAAAGAAAGGAGAGAAGAAGGAGAAAAAACAGCAATCA
ATAGCTGGAAAGTGCCGACTCTAAGCCAATAGATGTTTCCCGTCTGGATCTTCGAATTGGTTGCATCATAA
CTGCTAGAAAACACCCTGATGCAGATTCTTTGTATGTGGAAGAAGTAGATGTCGGAGAAATAGCCCCAAG
GACAGTTGTCAAGTGGCCTGGTGAATCATGTTTCTTGAACAGATGCAAAATCGGATGGTGAATTTACTT
TGTAACCTGAAACCTGCAAAGATGAGGGGAGTATTATCTCAAGCAATGGTCATGTGTGCTAGTTCACCAG
AGAAAATTGAAATCTTGGCTCCTCCAAATGGGTCTGTTCTGGAGACAGAATTACTTTTGATGCTTTCCC
AGGAGAGCCTGACAAGGAGCTGAATCCTAAGAAGAAGATTTGGGAGCAGATCCAGCCTGATCTTCACACT
AATGATGAGTGTGTGGCTACATACAAAGGAGTTCCTTTGAGGTGAAAGGGAAGGAGTATGTAGGGCTC
AAACCATGAGCAACAGTGAATCAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG227107 representing NM_001142416
 Red=Cloning site Green=Tags(s)

MANNDAVLKRLEQKGAEDQIEIYLKQQVSLLEKAILQATLREEKLRVENAKLKEIEELKQELIQAE
 IQNGVKQIPFPGTPLHANSMVSENVISQSTAVTTVSSGTKEQIKGGTGDEKKAKEIEKKGEKKEKKQQS
 IAGSADSKPIDVSRDLRIGCIITARKHPDADSLYVEEVDVGEIAPRTVVSGLVNHVPLEQMQRNVILL
 CNLKPAKMRGVL SQAMVMCASSPEKIEILAPPNGSVPGDRITFDAFPGEKELNPKKKIWEQIQPDLHT
 NDECVATYKGVPFVKGKGVCRATMSNSGIK

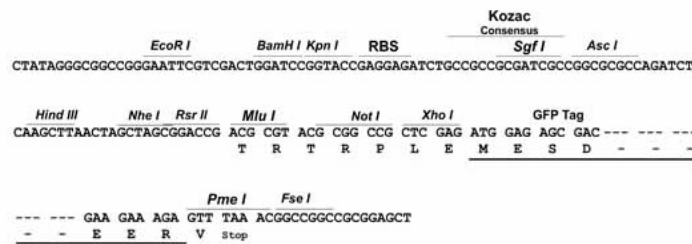
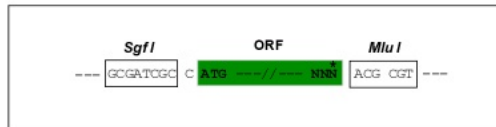
TRTRPLE - GFP Tag - V

Restriction Sites:

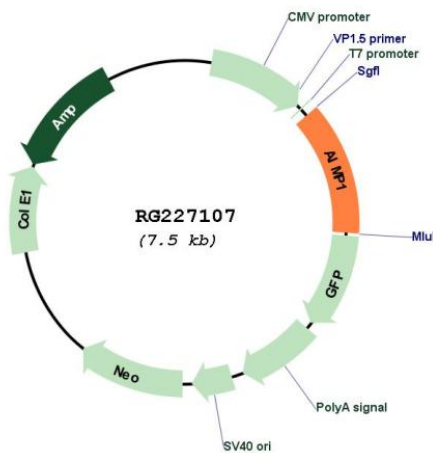
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001142416

ORF Size: 1008 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:	<ol style="list-style-type: none">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 Size:	2598 bp
RefSeq ORF:	939 bp
Locus ID:	9255
UniProt ID:	Q12904
Cytogenetics:	4q24
Protein Families:	Druggable Genome
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]