

## Product datasheet for **SC117158**

### EMAP II (AIMP1) (NM\_004757) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	EMAP II (AIMP1) (NM_004757) Human Untagged Clone
Tag:	Tag Free
Symbol:	EMAP II
Synonyms:	EMAP2; EMAPII; HLD3; p43; SCYE1
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC117158 sequence for NM_004757 edited (data generated by NextGen Sequencing)

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ATGGCAAATAATGATGCTGTTCTGAAGAGACTGGAGCAGAAGGGTGCAGAGGCAGATCAA
ATCATTGAATATCTTAAGCAGCAAGTTTCTCTACTTAAGGAGAAAAGCAATTTTGCAGGCA
ACTTTGAGGGAAGAGAAGAACTTCGAGTTGAAAATGCTAAACTGAAGAAAGAAATTGAA
GAACTGAAACAAGAGCTAATTCAGGCAGAAAATCAAAATGGAGTGAAGCAATACCATTT
CCATCTGGTACTCCACTGCACGCTAATTCTATGGTTTCTGAAAATGTGATACAGTCTACA
GCAGTAACAACCGTATCTTCTGGTACCAAAGAACAGATAAAAGGAGGAACAGGAGACGAA
AAGAAAGCGAAAGAGAAAATTGAAAAGAAAGGAGAGAAGAAGGAGAAAAAACAGCAATCA
ATAGCTGGAAGTGCCGACTCTAAGCCAATAGATGTTTCCCGTCTGGATCTTCGAATTGGT
TGCATCATAACTGCTAGAAAACACCTGATGCAGATTCTTTGTATGTGGAAGAAGTAGAT
GTCGGAGAAAATAGCCCCAAGGACAGTTGTCAAGTGGCCTGGTGAATCATGTTCTCTTGA
CAGATGCAAAAATCGGATGGTGATTTTACTTTGTAACTGAAACCTGCAAAGATGAGGGGA
GTATTATCTCAAGCAATGGTCATGTGTGCTAGTTCACCAGAGAAAATTGAAATCTTGGCT
CCTCCAAATGGGTCTGTTCTGGAGACAGAATTAATTTTGTGCTTTCCAGGAGAGCCT
GACAAGGAGCTGAATCCTAAGAAGAAGATTTGGGAGCAGATCCAGCCTGATCTTCACACT
AATGATGAGTGTGTGGCTACATACAAAGGAGTTCCTTTGAGGTGAAAGGGAAGGGAGTA
TGTAGGGCTCAAACCATGAGCAACAGTGAATCAATAA
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Clone variation with respect to NM\_004757.3



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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_004757 unedited TGTAATACGACTCACTATAGGGCGGCCGAATTCGGCACGAGGGCTTCCTGCTGTGGCT GTCTCGGAACCCGTGGTCTCCGCTTCATGATTTTCTGCCGTCTCTTGGCAAAAATGGCA AATAATGATGCTGTTCTGAAGAGACTGGAGCAGAAGGGTGAGAGGCAGATCAAATCATT GAATATCTTAAGCAGCAAGTTTCTACTTAAGGAGAAAGCAATTTTGCAGGCAACTTTG AGGAAGAGAAGAACTTCGAGTTGAAAATGCTAACTGAAGAAAGAAATGAAGAAGT AAACAAGAGCTAATTCAGGCAGAAATTCAAAATGGAGTGAAGCAAATACCATTTCCATCT GGTACTCCACTGCACGCTAATTCTATGGTTTCTGAAAATGTGATACAGTCTACAGCAGTA ACAACCGTATCTTCTGGTACCAAAGAACAGATAAAAGGAGGAACAGGAGACGAAAAGAAA GCGAAAGAGAAAATTGAAAAGAAAGGAGAGAAGAAGGAGAAAAAACAGCAATCAATAGCT GGAAGTGCCGACTCTAAGCCAATAGATGTTTCCCGTCTGGATCTTCAATTGGTTGCATC ATAACTGCTAGAAAACACCCTGATGCAGATTCTTTGTATGTGGAAGAAGTAGATGTCGGA GAAATAGCCCAAGGACAGTTGTCAGTGGCCTGGTGAATATTGTTCTCTTGAACAGATGC AAATCGGATGGTGATTTTACTTTGTAACCCTGAACCTGCAAGATGAGGGGAGTATTATCT CAAGCATGGTCATGTGTGCTAATTCACAGAGAAATTGAATCTTGCTCCTCAAAGGGTCTG TCTGGAGACAAATACTTTTGATGCTTTCAGGAGAGCTGACAGGAGCTGAATCTAGAAG AGATTGGGACCGACCCC
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_004757
<b>Insert Size:</b>	2600 bp
<b>OTI Disclaimer:</b>	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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a>
<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>RefSeq:</b>	<a href="#">NM_004757.2</a> , <a href="#">NP_004748.2</a>
<b>RefSeq Size:</b>	1764 bp

RefSeq ORF: 939 bp

Locus ID: 9255

UniProt ID: [Q12904](#)

Cytogenetics: 4q24

Domains: tRNA\_bind

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]

Transcript Variant: This variant (1) represents the longest transcript and encodes the shorter isoform (a). Both variants 1 and 2 encode the same isoform.