

**AIMP1 / EMAP II Antibody (C-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS16038****Specification**

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**AIMP1 / EMAP II Antibody (C-Terminus) - Product Information**

Application	WB, IHC-P, E
Primary Accession	<a href="#">Q12904</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A E~~N/A

**AIMP1 / EMAP II Antibody (C-Terminus) - Additional Information****Gene ID** 9255**Other Names**

Aminoacyl tRNA synthase complex-interacting multifunctional protein 1, Multisynthase complex auxiliary component p43, Endothelial monocyte-activating polypeptide 2, EMAP-2, Endothelial monocyte-activating polypeptide II, EMAP-II, Small inducible cytokine subfamily E member 1, AIMP1, EMAP2, SCYE1

**Target/Specificity**

AIMP1 antibody is human, mouse and rat reactive. At least two isoforms of AIMP1 are known to exist; this antibody will recognize both isoforms. AIMP1 antibody is predicted to not cross-react with AIMP2.

**Reconstitution & Storage**

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

**Precautions**

AIMP1 / EMAP II Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**AIMP1 / EMAP II Antibody (C-Terminus) - Protein Information****Name** AIMP1**Synonyms** EMAP2, SCYE1**Function**

Non-catalytic component of the multisynthase complex. Stimulates the catalytic activity of cytoplasmic arginyl-tRNA synthase (PubMed:<a href="http://www.uniprot.org/citations/10358004" target="\_blank">10358004</a>). Binds tRNA. Possesses inflammatory cytokine activity

(PubMed:<a href="http://www.uniprot.org/citations/11306575" target="\_blank">11306575</a>). Negatively regulates TGF-beta signaling through stabilization of SMURF2 by binding to SMURF2 and inhibiting its SMAD7- mediated degradation (By similarity). Involved in glucose homeostasis through induction of glucagon secretion at low glucose levels (By similarity). Promotes dermal fibroblast proliferation and wound repair (PubMed:<a href="http://www.uniprot.org/citations/16472771" target="\_blank">16472771</a>). Regulates KDELR1-mediated retention of HSP90B1/gp96 in the endoplasmic reticulum (By similarity). Plays a role in angiogenesis by inducing endothelial cell migration at low concentrations and endothelial cell apoptosis at high concentrations (PubMed:<a href="http://www.uniprot.org/citations/12237313" target="\_blank">12237313</a>). Induces maturation of dendritic cells and monocyte cell adhesion (PubMed:<a href="http://www.uniprot.org/citations/11818442" target="\_blank">11818442</a>). Modulates endothelial cell responses by degrading HIF-1A through interaction with PSMA7 (PubMed:<a href="http://www.uniprot.org/citations/19362550" target="\_blank">19362550</a>).

### Cellular Location

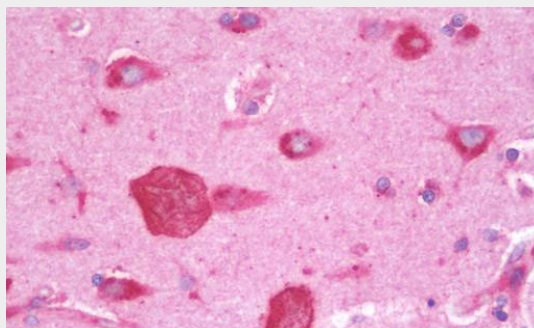
Nucleus. Cytoplasm, cytosol. Secreted. Endoplasmic reticulum {ECO:0000250|UniProtKB:P31230}. Golgi apparatus {ECO:0000250|UniProtKB:P31230}. Note=Enriched in secretory vesicles of pancreatic alpha cells and secreted from the pancreas in response to low glucose levels (By similarity). Secreted in response to hypoxia (PubMed:10850427). Also secreted in response to both apoptotic and necrotic cell death. {ECO:0000250|UniProtKB:P31230, ECO:0000269|PubMed:10850427}

### AIMP1 / EMAP II Antibody (C-Terminus) - Protocols

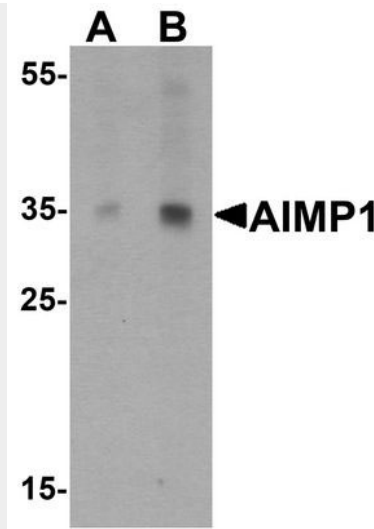
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### AIMP1 / EMAP II Antibody (C-Terminus) - Images



Anti-AIMP1 / EMAP II / p43 antibody IHC staining of human brain, cortex.



Western blot analysis of AIMP1 in rat brain tissue lysate with AIMP1 antibody at (A) 0.5 and (B)...

#### **AIMP1 / EMAP II Antibody (C-Terminus) - Background**

Non-catalytic component of the multisynthase complex. Stimulates the catalytic activity of cytoplasmic arginyl-tRNA synthase. Binds tRNA. Possesses inflammatory cytokine activity. Negatively regulates TGF-beta signaling through stabilization of SMURF2 by binding to SMURF2 and inhibiting its SMAD7-mediated degradation. Involved in glucose homeostasis through induction of glucagon secretion at low glucose levels. Promotes dermal fibroblast proliferation and wound repair. Regulates KDELRL1- mediated retention of HSP90B1/gp96 in the endoplasmic reticulum. Plays a role in angiogenesis by inducing endothelial cell migration at low concentrations and endothelial cell apoptosis at high concentrations. Induces maturation of dendritic cells and monocyte cell adhesion. Modulates endothelial cell responses by degrading HIF-1A through interaction with PSMA7.

#### **AIMP1 / EMAP II Antibody (C-Terminus) - References**

Kao J.,et al.J. Biol. Chem. 269:25106-25119(1994).  
Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Park S.G.,et al.J. Biol. Chem. 274:16673-16676(1999).  
Barnett G.,et al.Cancer Res. 60:2850-2857(2000).