

## AIMP1 / EMAP II Antibody (aa137-149)

Goat Polyclonal Antibody Catalog # ALS16089

## **Specification**

## AIMP1 / EMAP II Antibody (aa137-149) - Product Information

Application IHC, WB
Primary Accession Q12904
Reactivity Human
Host Goat
Clonality Polyclonal
Calculated MW 34kDa KDa

## AIMP1 / EMAP II Antibody (aa137-149) - 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

Human AIMP1 / SCYE1. This antibody is expected to recognize. Reported variants represent identical protein: NP\_004748.2, NP\_001135887.1

### **Reconstitution & Storage**

Store at -20°C. Minimize freezing and thawing.

### **Precautions**

AIMP1 / EMAP II Antibody (aa137-149) is for research use only and not for use in diagnostic or therapeutic procedures.

# AIMP1 / EMAP II Antibody (aa137-149) - 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 endothelian 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**

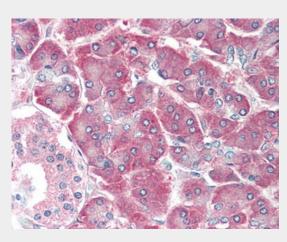
Nucleus. Cytoplasm, cytosol. Secreted. Endoplasmic reticulum {ECO:0000250|UniProtKB:P31230}. Golgi apparatus {ECO:0000250|UniProtKB:P31230}. Note=Enriched in secretory vesicles of pancreatic alpha cells and secreted from the pancreas in response to low glucose levels (By similarity). Secreted in response 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 (aa137-149) - Protocols

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

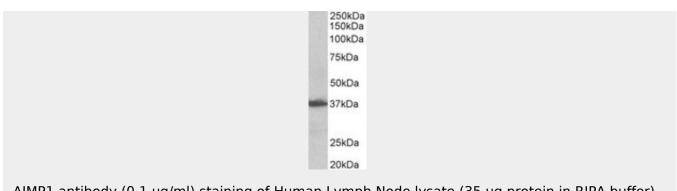
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## AIMP1 / EMAP II Antibody (aa137-149) - Images



Anti-AIMP1 / EMAP II / p43 antibody IHC staining of human pancreas.





AIMP1 antibody (0.1 ug/ml) staining of Human Lymph Node lysate (35 ug protein in RIPA buffer).

# AIMP1 / EMAP II Antibody (aa137-149) - 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 KDELR1- mediated retention of HSP90B1/gp96 in the endoplasmic reticulum. Plays a role in angiogenesis by inducing endothelial cell migration at low concentrations and endothelian 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 (aa137-149) - 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).