

## **KD-Validated Anti-AIMP1 Rabbit Monoclonal Antibody**

Rabbit monoclonal antibody Catalog # AGI1981

#### **Specification**

## KD-Validated Anti-AIMP1 Rabbit Monoclonal Antibody - Product Information

Application WB
Primary Accession Q12904

Reactivity
Clonality
Monoclonal
Isotype
Rat, Human, Mouse
Monoclonal
Rabbit IgG

Calculated MW Predicted, 34 kDa, observed, 34 kDa KDa

Gene Name AIMI

Aliases

AIMP1; Aminoacyl TRNA Synthetase

Complex Interacting Multifunctional

Protein 1; EMAPII; SCYE1; P43; Small

Inducible Cytokine Subfamily E, Member 1

(Endothelial Monocyte-Activating);

**Aminoacyl TRNA Synthase** 

Complex-Interacting Multifunctional Protein 1; Multisynthetase Complex Auxiliary Component P43; Multisynthase

Complex Auxiliary Component P43; ARS-Interacting Multifunctional Protein 1; EMAP-2; EMAP2; Endothelial-Monocyte Activating Polypeptide II; Endothelial Monocyte-Activating Polypeptide; EMAP II;

HLD3

Immunogen A synthesized peptide derived from human

**EMAP II** 

### KD-Validated Anti-AIMP1 Rabbit Monoclonal Antibody - 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

## KD-Validated Anti-AIMP1 Rabbit Monoclonal Antibody - 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}

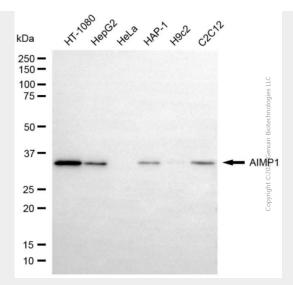
## **KD-Validated Anti-AIMP1 Rabbit Monoclonal Antibody - Protocols**

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

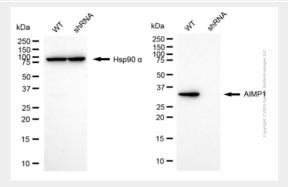
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# KD-Validated Anti-AIMP1 Rabbit Monoclonal Antibody - Images





Western blotting analysis using anti-AIMP1 antibody (Cat#AGI1981). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-AIMP1 antibody (Cat#AGI1981, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-AIMP1 antibody (Cat#AGI1981). AIMP1 expression in wild-type (WT) and AIMP1 shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-AIMP1 antibody (Cat#AGI1981, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.