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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	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 34 kDa, observed, 34 kDa KDa**
Gene Name	**AIMP1**
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:10358004). Binds tRNA. Possesses inflammatory cytokine activity (PubMed:11306575). 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:16472771). 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:12237313). Induces maturation of dendritic cells and monocyte cell adhesion (PubMed:11818442). Modulates endothelial cell responses by degrading HIF-1A through interaction with PSMA7 (PubMed:19362550).

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
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-AIMP1 Rabbit Monoclonal Antibody - Images

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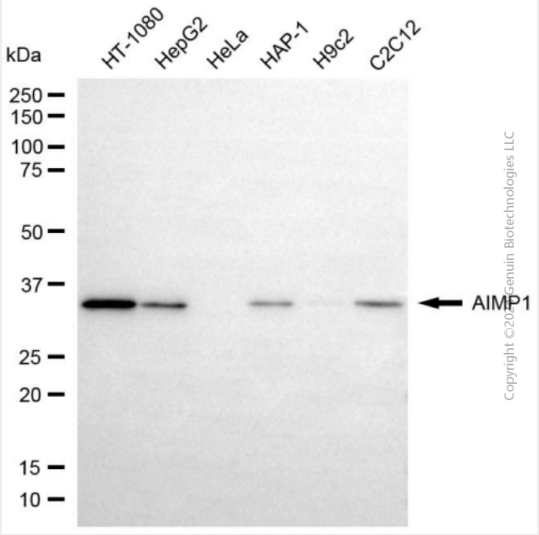
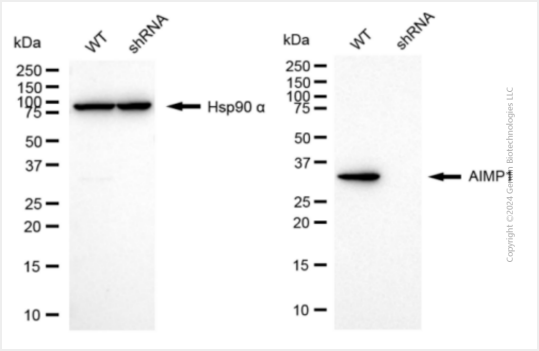


Western blotting analysis using anti-AIMP1 antibody (Cat#AGI1981). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-AIMP1 antibody (Cat#AGI1981, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-AIMP1 antibody (Cat#AGI1981). AIMP1 expression in wild-type (WT) and AIMP1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α 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.