Rabbit AIMP1 Polyclonal Antibody | anti-AIMP1 antibody

AIMP1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326964	**Rabbit**	**Human, Mouse, Rat**	**Flow Cytometry, Functional Assay, ELISA, Immunoprecipitation, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot**

PRODUCT SYNONYMS

AIMP1; Polyclonal Antibody; AIMP1 Antibody; AIMP 1; Aimp1; AIMP1/p43; AIMP1_HUMAN; Aminoacyl tRNA synthetase complex-interacting multifunctional protein 1; ARS interacting multifunctional protein 1; EMAP 2; EMAP-2; EMAP-II; EMAP2; EMAPII; Endothelial monocyte activating polypeptide 2; Endothelial monocyte activating polypeptide; Endothelial monocyte-activating polypeptide 2; Endothelial monocyte-activating polypeptide II; HLD3; Multisynthase complex auxiliary component p43; Multisynthetase complex auxiliary component p43; OTTHUMP00000219673; p43; Scye 1; Scye1; formerly; Small inducible cytokine subfamily E member 1; Small inducible cytokine subfamily E; member 1 (endothelial monocyte-activating); member 1; anti-AIMP1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	AIMP1 antibody detects endogenous levels of total AIMP1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	312
Applicable Applications for anti-AIMP1 antibody	FCM/FACS (Flow Cytometry), ELISA, IP (Immunoprecipitation), ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human AIMP1
Subcellular Location	Nucleus. Cytoplasm > Cytosol. Cytoplasmic Vesicle > Secretory Vesicle. Secreted. Endoplasmic Reticulum. Golgi Apparatus. Enriched in secretory vesicles of pancreatic alpha cells and secreted from the pancreas in response to low glucose levels (By similarity). Also secreted in response to hypoxia and both apoptotic and necrotic cell death.
Predicted Cross Reactivity	**Pig, Bovine, Horse, Dog**
Similarity	Pig (90%), Bovine (80%), Horse (80%), Dog (90%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES

IHC (Immunohistochemisry)
AAA326964 at 1/100 staining Human spleen tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of Hela whole cell lysates, using AIMP1 Antibody. The lane on the left is treated with the antigen-specific peptide.

IF (Immunofluorescence)
AAA326964 staining Hela by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-AIMP1 antibody	Description: 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. 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). Subunit Structure: Homodimer. Part of a multisubunit complex that groups tRNA ligases for Arg (RARS), Asp (DARS), Gln (QARS), Ile (IARS), Leu (LARS), Lys (KARS), Met (MARS) the bifunctional ligase for Glu and Pro (EPRS) and the auxiliary subunits AIMP1/p43, AIMP2/p38 and EEF1E1/p18 (PubMed:19131329, PubMed:19289464). Interacts (via N-terminus) with RARS (via N-terminus) (PubMed:10358004, PubMed:17443684). Part of a complex composed of RARS, QARS and AIMP1 (PubMed:25288775). Interacts (via C-terminus) with SMURF2. Interacts (via N-terminus) with HSP90B1/gp96 (via C-terminus) (By similarity). Interacts with PSMA7 (PubMed:19362550). Post-translational Modifications: Cleaved by caspase-7 in response to apoptosis to produce EMAP-II.

NCBI AND UNIPROT INFORMATION

NCBI GI #	215490009
NCBI GeneID	9255
NCBI Accession #	NP_001135887.1
NCBI GenBank Nucleotide #	NM_001142415.1
UniProt Accession #	Q12904; Q6FG28; Q96CQ9; B3KTR2; B4E1S7

Molecular Weight	Observed: 34 kDa Predicted: 35 kDa
NCBI Official Full Name	aminoacyl tRNA synthase complex-interacting multifunctional protein 1 isoform a
NCBI Official Synonym Full Names	aminoacyl tRNA synthetase complex interacting multifunctional protein 1
NCBI Official Symbol	AIMP1
NCBI Official Synonym Symbols	p43; HLD3; EMAP2; SCYE1; EMAPII
NCBI Protein Information	aminoacyl tRNA synthase complex-interacting multifunctional protein 1
UniProt Protein Name	Aminoacyl tRNA synthase complex-interacting multifunctional protein 1
UniProt Gene Name	**AIMP1**
UniProt Synonym Gene Names	EMAP2; SCYE1; EMAP-2; EMAP-II

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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