



Rabbit Anti-EMAP2 antibody

SL5908R

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| Product Name: | EMAP2 |
| Chinese Name: | 内皮单核细胞激活肽2抗体 |
| Alias: | AIMP 1; Aimp1; AIMP1/p43; AIMP1_HUMAN ; Aminoacyl tRNA synthetase complex-interacting multifunctional protein 1; ARS interacting multifunctional protein 1; ARS-interacting multifunctional protein 1; EMAP 2; EMAP-2; EMAP-II; EMAP II; EMAP2; EMAPII; Endothelial monocyte activating polypeptide 2; Endothelial Monocyte Activating Polypeptide; Endothelial monocyte-activating polypeptide 2; Endothelial monocyte-activating polypeptide II; Multisynthase complex auxiliary component p43; Multisynthetase complex auxiliary component p43; p43 antibody Scye 1; Scye1; Small Inducible Cytokine Subfamily E Member 1; Small inducible cytokine subfamily E, member 1 (endothelial monocyte-activating). |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human,Mouse,Rat,Dog,Pig,Cow,Rabbit, |
| Applications: | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 34kDa |
| Cellular localization: | The nucleuscytoplasmic |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human EMAP2:201-300/312 |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

PubMed:

[PubMed](#)

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 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.

Function:

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 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.

Product Detail:

Subunit:

Homodimer. Component of the multisynthase complex which is comprised of a bifunctional glutamyl-prolyl-tRNA synthase, the monospecific isoleucyl, leucyl, glutaminyl, methionyl, lysyl, arginyl and aspartyl-tRNA synthases, and three auxiliary proteins, EEF1E1/p18, AIMP2/p38 and AIMP1/p43. Interacts (via N-terminus) with RARS (via N-terminus). Interacts (via C-terminus) with SMURF2. Interacts (via N-terminus) with HSP90B1/gp96 (via C-terminus). Interacts with PSMA7.

Subcellular Location:

Nucleus. Cytoplasm, cytosol. Cytoplasmic vesicle, secretory vesicle (By similarity). Secreted (By similarity). Endoplasmic reticulum (By similarity). Golgi apparatus (By similarity). Note=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.

Post-translational modifications:

Cleaved by caspase-7 in response to apoptosis to produce EMAP-II.

DISEASE:

Defects in AIMP1 are the cause of leukodystrophy hypomyelinating type 3 (HLD3)

[MIM:260600]. A severe autosomal recessive hypomyelinating leukodystrophy characterized by early infantile onset of global developmental delay, lack of development, lack of speech acquisition, and peripheral spasticity associated with decreased myelination in the central nervous system.

Similarity:

Contains 1 tRNA-binding domain.

SWISS:

Q12904

Gene ID:

9255

Database links:

[Entrez Gene: 9255](#) Human

[Entrez Gene: 114632](#) Rat

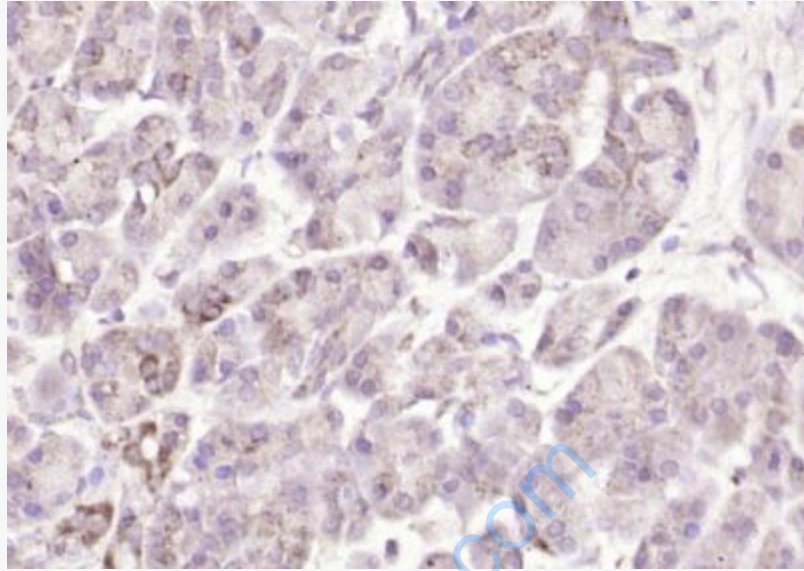
[Oimim: 603605](#) Human

[SwissProt: Q12904](#) Human

[Unigene: 591680](#) Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (human pancreatic carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (EMAP2) Polyclonal Antibody, Unconjugated (SL5908R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.