


Product datasheet

Anti-EMAP II/AIMP1 antibody ab96506

[3 References](#) [2 Images](#)

Overview

Product name	Anti-EMAP II/AIMP1 antibody
Description	Rabbit polyclonal to EMAP II/AIMP1
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Pig 
Immunogen	Recombinant fragment corresponding to Human EMAP II/AIMP1 aa 1-233 (N terminal).
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: 1.21% Tris, 0.75% Glycine, 10% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab96506 in the following tested applications.

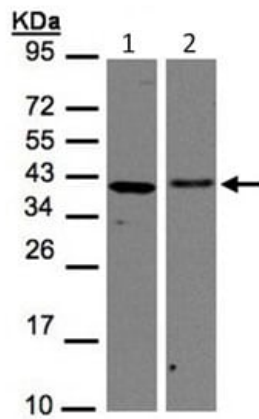
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 34 kDa.
ICC/IF		1/100 - 1/200.

Target

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.
Involvement in 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.
Sequence similarities	Contains 1 tRNA-binding domain.
Post-translational modifications	Cleaved by caspase-7 in response to apoptosis to produce EMAP-II.
Cellular localization	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.

Images



Western blot - Anti-EMAP II/AIMP1 antibody (ab96506)

All lanes : Anti-EMAP II/AIMP1 antibody (ab96506) at 1/1000 dilution

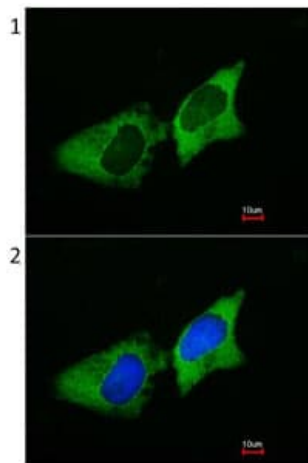
Lane 1 : H1299 whole cell lysate

Lane 2 : HepG2 whole cell lysate

Lysates/proteins at 30 µg per lane.

Predicted band size: 34 kDa

12% SDS PAGE



Immunocytochemistry/ Immunofluorescence - Anti-EMAP II/AIMP1 antibody (ab96506)

Immunofluorescence analysis of paraformaldehyde-fixed HeLa, using ab96506 at 1:200 dilution. Image 2: Merged with DNA probe.

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