

Anti-EMAP II/AIMP1 antibody [EPR14168(B)] - BSA and Azide free ab250950

Recombinant RabMAb

4 Images

Overview

Product name	Anti-EMAP II/AIMP1 antibody [EPR14168(B)] - BSA and Azide free
Description	Rabbit monoclonal [EPR14168(B)] to EMAP II/AIMP1 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt, ICC/IF or IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	<p>ab250950 is the carrier-free version of ab188320.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Clonality	Monoclonal
Clone number	EPR14168(B)
Isotype	IgG

Applications

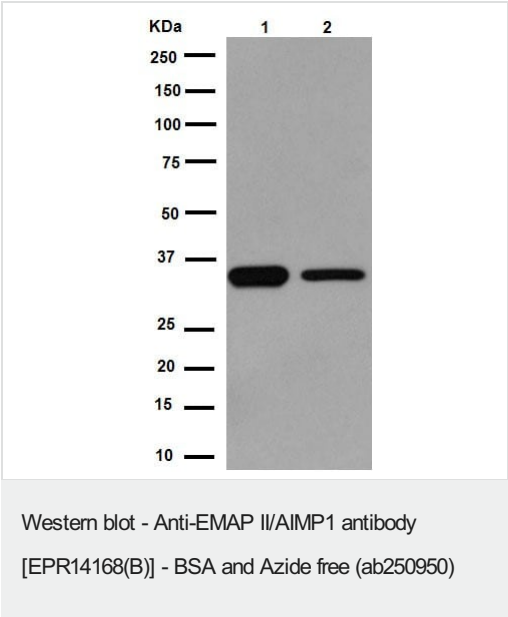
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab250950 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 34 kDa (predicted molecular weight: 34 kDa).

Application notes Is unsuitable for Flow Cyt, ICC/IF or IHC-P.

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.



All lanes : Anti-EMAP II/AIMP1 antibody [EPR14168(B)] ([ab188320](#)) at 1/5000 dilution

Lane 1 : HT-1080 cell lysate

Lane 2 : HeLa cell lysate

Lysates/proteins at 20 µg per lane.

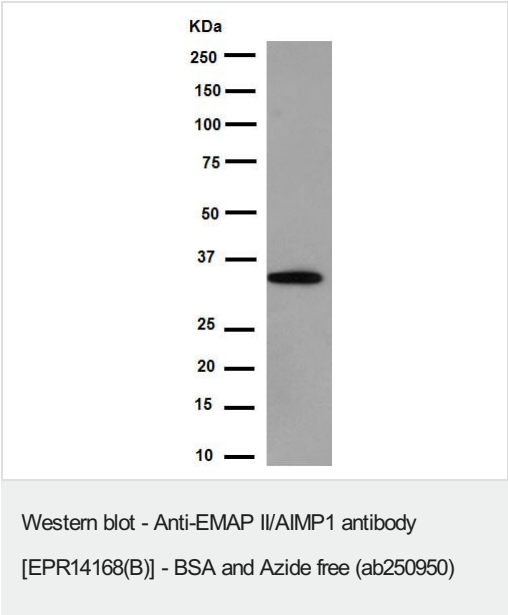
Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

This data was developed using [ab188320](#), the same antibody clone in a different buffer formulation.



Anti-EMAP II/AIMP1 antibody [EPR14168(B)] ([ab188320](#)) at 1/1000 dilution + Human fetal spleen lysate at 10 µg

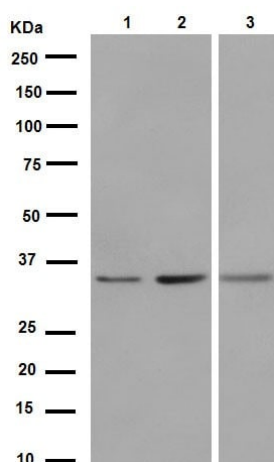
Secondary

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

This data was developed using [ab188320](#), the same antibody clone in a different buffer formulation.



Western blot - Anti-EMAP II/AIMP1 antibody
[EPR14168(B)] - BSA and Azide free (ab250950)

All lanes : Anti-EMAP II/AIMP1 antibody [EPR14168(B)]
([ab188320](#)) at 1/1000 dilution

Lane 1 : Mouse kidney tissue lysate

Lane 2 : Mouse spleen tissue lysate

Lane 3 : C6 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit IgG, (H+L), peroxidase conjugated at
1/1000 dilution

Predicted band size: 34 kDa

Observed band size: 34 kDa

This data was developed using [ab188320](#), the same antibody
clone in a different buffer formulation.

Why choose a recombinant antibody?



**Research with
confidence**
Consistent and
reproducible results



**Long-term and
scalable supply**
Recombinant
technology



**Success from the
first experiment**
Confirmed
specificity



**Ethical standards
compliant**
Animal-free
production

Anti-EMAP II/AIMP1 antibody [EPR14168(B)] - BSA
and Azide free (ab250950)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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