abcam

ab250563

Anti-PSMD9 antibody [EPR12947] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR12947
Purification technique	Affinity purification Protein A
Concentration	1.03 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-

Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information 26S proteasome non-ATPase regulatory subunit 9

Function	Acts as a chaperone during the assembly of the 26S proteasome, specifically of the base subcomplex of the PA700/19S regulatory complex (RC). During the base subcomplex assembly is part of an intermediate PSMD9:PSMC6:PSMC3 module, also known as modulator trimer complex; PSMD9 is released during the further base assembly process.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab250563 is the carrier-free version of ab181998.

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. 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.

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.

Compatibility
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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	PSMD9 also known as 26S proteasome non-ATPase regulatory subunit 9 or Bridge-1 is a component of the 26S proteasome complex. This protein has a mass of approximately 49 kDa. It plays a role in regulating the degradation of ubiquitinated proteins through its function in the proteasome complex. The protein is expressed in multiple tissues including skeletal muscle and heart.
Biological function summary	PSMD9 participates in proteasomal degradation of intracellular proteins facilitating protein turnover and maintaining cellular homeostasis. It integrates into the 26S proteasome complex consisting of the 20S core particle and the 19S regulatory particle. Within the proteasome PSMD9 interacts with various subunits to regulate the recognition and unfolding of ubiquitinated substrates.
Pathways	PSMD9 plays an important role in the ubiquitin-proteasome pathway which is essential for protein regulation and quality control in cells. This pathway involves tagging proteins with ubiquitin for degradation. PSMD9 shows functional relationships with other proteasome subunits like PSMD4 and PSMD11 which participate in similar regulation processes.
Associated diseases and disorders	Dysfunction of the ubiquitin-proteasome pathway involving PSMD9 contributes to neurodegenerative diseases such as Alzheimer's disease and certain types of cancer. In Alzheimer's improper proteasomal activity can lead to the accumulation of damaged proteins. PSMD9's activity links it to other proteins implicated in these diseases including PSMD1 and the amyloid precursor protein in Alzheimer's disease.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

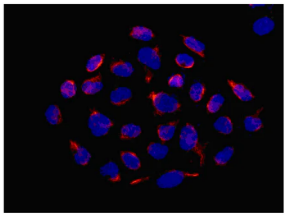
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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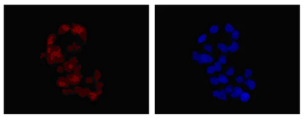
5 product images



Immunocytochemistry/ Immunofluorescence - Anti-PSMD9 antibody [EPR12947] - BSA and Azide free (ab250563)

PSMD9 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PSMD9 antibody

This data was developed using ab181998, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of HeLa cells (-20°C acetone-fixed) labeling PSMD9 with ab181998 at 1/500 dilution followed by Goat anti rabbit IgG (Dylight 555) secondary and counter-stained with DAPI (blue).

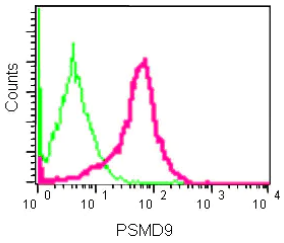


Immunocytochemistry/ Immunofluorescence - Anti-PSMD9 antibody [EPR12947] - BSA and Azide free (ab250563)

PSMD9 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-PSMD9 antibody

This data was developed using ab181998, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of HepG2 cells (paraformaldehyde-fixed, 4%) labeling PSMD9 with ab181998 at 1/500 dilution. A Goat anti rabbit IgG(Alexa Fluor® 555) was used as secondary

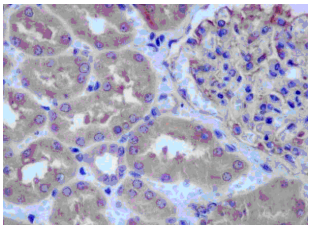
antibody. Counterstained with DAPI (blue).



Flow Cytometry (Intracellular) - Anti-PSMD9 antibody [EPR12947] - BSA and Azide free (ab250563)

PSMD9 Flow Cytometry (Intracellular) staining using rabbit Anti-PSMD9 antibody

This data was developed using ab181998, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of HeLa cells (paraformaldehyde-fixed, 2%) labeling PSMD9 with ab181998 at 1/300 dilution (red) or a rabbit IgG (negative) (green), followed by secondary Goat anti-rabbit IgG (FITC) at 1/150 dilution.

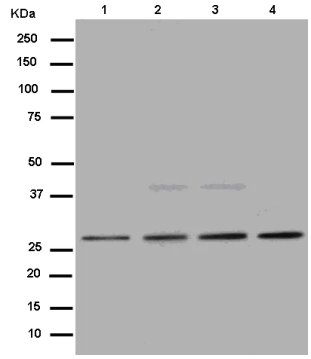


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PSMD9 antibody [EPR12947] - BSA and Azide free (ab250563)

PSMD9 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PSMD9 antibody

This data was developed using ab181998, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling PSMD9 with ab181998 at 1/100 dilution followed by pre-diluted HRP-conjugated secondary antibody and counter-stained with Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Western blot - Anti-PSMD9 antibody [EPR12947] - BSA and Azide free (ab250563)

This data was developed using ab181998, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-PSMD9 antibody [EPR12947] (ab181998) at 1/1000 dilution

Lane 1:
Human fetal liver tissue lysate at 20 µg

Lane 2:
HeLa cell lysate at 20 µg

Lane 3:
HepG2 cell lysate at 20 µg

Lane 4:
293 cell lysate at 20 µg

Secondary

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

Predicted band size: 25 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.