abcam

ab178417

Anti-PSMD7/Mov34 antibody [EPR13516(B)]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR13516(B)
Purification technique	Affinity purification Protein A
Concentration	0.097 - 0.102 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/5000
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information PSMD7

Function	Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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.

Supplementary info

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

Activity summary	The PSMD7 protein also known as Mov34 is a subunit of the 26S proteasome and plays an important role in protein degradation. The proteasome itself is a massive complex and PSMD7 is a 37 kDa protein component. Its primary site of expression is within the cytoplasm and nucleus of cells where it facilitates the breakdown of ubiquitinated proteins. This activity is essential for maintaining cellular protein homeostasis.
Biological function summary	The proper function of PSMD7 supports cell cycle regulation apoptosis and DNA damage repair. It exists as part of the 26S proteasome complex which is responsible for the regulated degradation of ubiquitin-conjugated proteins. This process controls various cellular mechanisms by ensuring that proteins are broken down after they have executed their function or if they become misfolded or damaged.
Pathways	The involvement of PSMD7 in proteolysis is central for processes such as the ubiquitin-proteasome pathway. This pathway is critical for protein turnover and the regulation of cellular processes including the cell cycle. PSMD7 works in tandem with other proteasomal subunits like PSMD4 and PSMD14 which help recruit and process ubiquitinated substrates.
Associated diseases and disorders	The malfunction of PSMD7 associates with certain cancers and neurodegenerative diseases. Aberrations in proteasome function involving PSMD7 may lead to the accumulation of damaged proteins which contributes to cancer development through unchecked cell proliferation. In neurodegenerative disorders like Alzheimer's disease proteins like tau and beta-amyloid which should normally be degraded accumulate due to proteasomal dysfunction involving PSMD7.

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

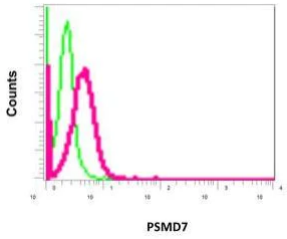
We do not recommend this combination. It is not covered by our product promise.

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.

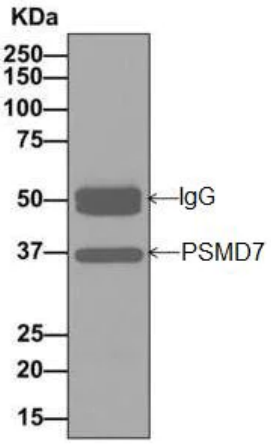
3 product images



Flow Cytometry (Intracellular) - Anti-PSMD7/Mov34 antibody [EPR13516(B)] (ab178417)

PSMD7/Mov34 Flow Cytometry (Intracellular) staining using rabbit Anti-PSMD7/Mov34 antibody

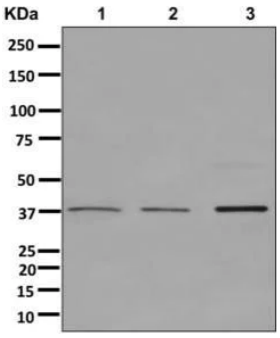
Intracellular flow cytometric analysis of permeabilized K562 cells labeling PSMD7/Mov34 with ab178417 at 1/10 dilution (red) compared with a rabbit IgG negative control (green).



Immunoprecipitation - Anti-PSMD7/Mov34 antibody [EPR13516(B)] (ab178417)

Western blot analysis on immunoprecipitation pellet from K562 cell lysate immunoprecipitated using ab178417 at 1/10 dilution.
All lanes:
Immunoprecipitation - Anti-PSMD7/Mov34 antibody [EPR13516(B)] (ab178417)

Predicted band size: 37 kDa



Western blot - Anti-PSMD7/Mov34 antibody [EPR13516(B)] (ab178417)

All lanes:
Western blot - Anti-PSMD7/Mov34 antibody [EPR13516(B)] (ab178417) at 1/1000 dilution

Lane 1:
HepG2 cell lysate at 10 µg

Lane 2:
HeLa cell lysate at 10 µg

Lane 3:
K562 cell lysate at 10 µg

Secondary

All lanes:
Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 37 kDa

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