


Product datasheet

Anti-PSMB10/MECL1 antibody [EPR14902] ab183506

KO VALIDATED Recombinant RabMAB

[12 References](#) [6 Images](#)

Overview

Product name	Anti-PSMB10/MECL1 antibody [EPR14902]
Description	Rabbit monoclonal [EPR14902] to PSMB10/MECL1
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, Daudi, HuT 78 and Raji cell lysates; Human fetal spleen and thymus tissue lysates. IHC-P: Human kidney adenocarcinoma tissue. Flow Cyt (intra): Daudi cells.
General notes	<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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR14902

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab183506 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
Flow Cyt (Intra)		1/90. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Detects a band of approximately 27 kDa (predicted molecular weight: 29 kDa).
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function

The proteasome is a multicatalytic proteinase complex which is characterized by its ability to cleave peptides with Arg, Phe, Tyr, Leu, and Glu adjacent to the leaving group at neutral or slightly basic pH. The proteasome has an ATP-dependent proteolytic activity. This subunit is involved in antigen processing to generate class I binding peptides.

Sequence similarities

Belongs to the peptidase T1B family.

Developmental stage

Highly expressed in immature dendritic cells (at protein level).

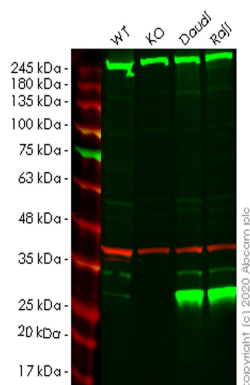
Post-translational modifications

Autocleaved. The resulting N-terminal Thr residue of the mature subunit is responsible for the nucleophile proteolytic activity.

Cellular localization

Cytoplasm. Nucleus.

Images



Western blot - Anti-PSMB10/MECL1 antibody [EPR14902] (ab183506)

All lanes : Anti-PSMB10/MECL1 antibody [EPR14902] (ab183506) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : PSMB10 knockout HeLa cell lysate

Lane 3 : Daudi cell lysate

Lane 4 : Raji cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

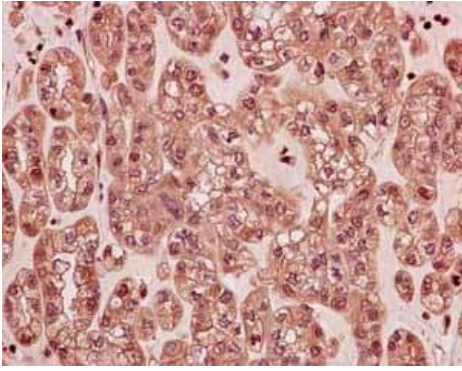
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 29 kDa

Observed band size: 29 kDa

Lanes 1-4: Merged signal (red and green). Green - ab183506 observed at 29 kDa. Red - loading control **ab8245** observed at 36 kDa.

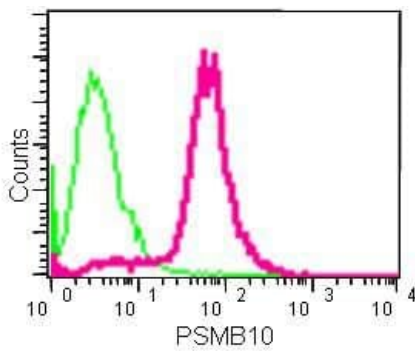
ab183506 Anti-PSMB10/MECL1 antibody [EPR14902] was shown to specifically react with PSMB10/MECL1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab264923** (knockout cell lysate **ab258145**) was used. Wild-type and PSMB10/MECL1 knockout samples were subjected to SDS-PAGE. ab183506 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PSMB10/MECL1 antibody [EPR14902] (ab183506)

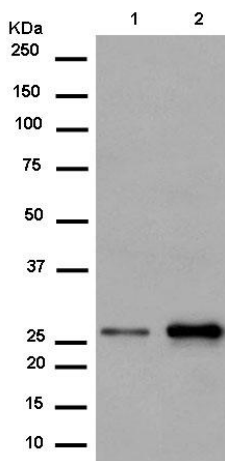
Immunohistochemical analysis of paraffin-embedded Human Kidney adenocarcinoma tissue labeling PSMB10/MECL1 with ab183506 at 1/100 dilution followed by pre-diluted HRP-conjugated secondary antibody and counter-stained with Hematoxylin.

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



Flow Cytometry (Intracellular) - Anti-PSMB10/MECL1 antibody [EPR14902] (ab183506)

Intracellular flow cytometric analysis of Daudi cells (2% paraformaldehyde-fixed) labeling PSMB10/MECL1 with ab183506 at 1/90 dilution (red) or a rabbit IgG (negative) (green), followed by Goat anti rabbit IgG (FITC) secondary at 1/150 dilution.



Western blot - Anti-PSMB10/MECL1 antibody [EPR14902] (ab183506)

All lanes : Anti-PSMB10/MECL1 antibody [EPR14902] (ab183506) at 1/1000 dilution

Lane 1 : Human fetal spleen tissue lysate

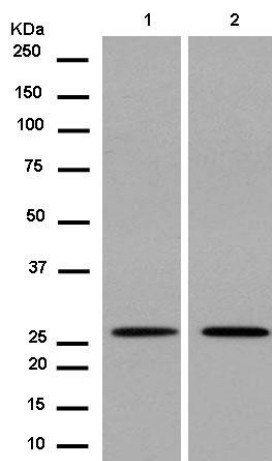
Lane 2 : Human fetal thymus tissue lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 29 kDa



Western blot - Anti-PSMB10/MECL1 antibody
[EPR14902] (ab183506)

All lanes : Anti-PSMB10/MECL1 antibody [EPR14902]
(ab183506) at 1/5000 dilution

Lane 1 : HuT 78 cell line lysate

Lane 2 : Raji cell line lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 29 kDa

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-PSMB10/MECL1 antibody [EPR14902]
(ab183506)

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

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