

## Product datasheet

# Anti-Proteasome subunit beta type 2/PSMB2 antibody [MCP165] ab22650

★★★★★ 1 Abreviews 4 References 4 Images

### Overview

<b>Product name</b>	Anti-Proteasome subunit beta type 2/PSMB2 antibody [MCP165]
<b>Description</b>	Mouse monoclonal [MCP165] to Proteasome subunit beta type 2/PSMB2
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt, IHC-P, WB <b>Unsuitable for:</b> IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Full length protein corresponding to Human Proteasome subunit beta type 2/PSMB2. Database link: <a href="#">P49721</a>
<b>Positive control</b>	WB: HeLa cell lysate; human ciliary body lysate. IHC-P: Human lymphoid tissue. Flow cyt: HeLa cells.
<b>General notes</b>	This product was previously labelled as PSMB2, Proteasome subunit beta type 2

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.

## Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 8.00 Preservative: 0.032% Sodium azide Constituents: 0.316% Tris HCl, 0.58% Sodium chloride
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	MCP165
<b>Isotype</b>	IgG1

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab22650** 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		Use 1µg for 10 <sup>6</sup> cells. <a href="#">ab170190</a> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000. Detects a band of approximately 28 kDa (predicted molecular weight: 23 kDa).

**Application notes** Is unsuitable for IP.

## Target

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**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 has a trypsin-like activity.

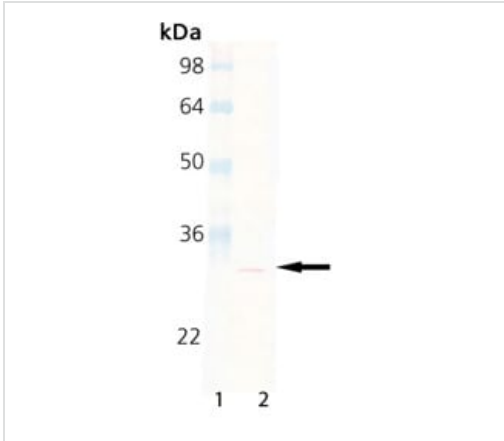
**Sequence similarities** Belongs to the peptidase T1B family.

**Cellular localization** Cytoplasm. Nucleus.

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## Images

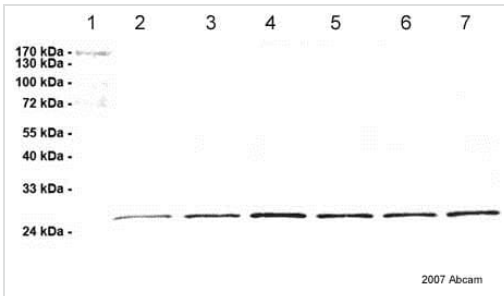
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Western blot - Anti-Proteasome subunit beta type 2/PSMB2 antibody [MCP165] (ab22650)

Anti-Proteasome subunit beta type 2/PSMB2 antibody [MCP165] (ab22650) at 1/1000 dilution + HeLa cell lysate

**Predicted band size:** 23 kDa



Western blot - Anti-Proteasome subunit beta type 2/PSMB2 antibody [MCP165] (ab22650)

This image is courtesy of an Abreview submitted by Dr Matthias Zenkel

**Lane 1 :** Protein Marker IV

**Lanes 2-7 :** Anti-Proteasome subunit beta type 2/PSMB2 antibody [MCP165] (ab22650) at 1/1000 dilution

**Lane 1 :** Protein Marker IV

**Lanes 2 & 4 & 6 :** Protein extract from ciliary body of diseased human donor at 2 µg

**Lanes 3 & 5 & 7 :** Protein extract from ciliary body of normal human donor at 2 µg

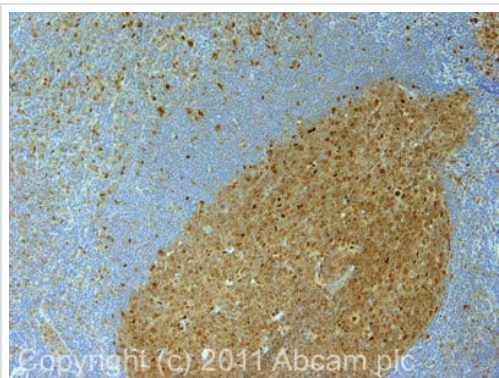
**Secondary**

**Lanes 2-7 :** HRP conjugated goat anti mouse antibody

**Predicted band size:** 23 kDa

**Observed band size:** 27 kDa

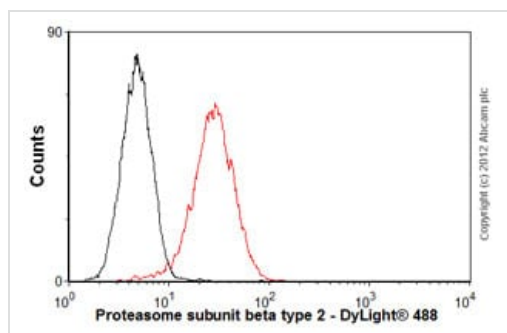
[why is the actual band size different from the predicted?](#)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Proteasome subunit beta type 2/PSMB2 antibody [MCP165] (ab22650)

IHC image of ab22650 staining in human normal lymphoid formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab22650, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Flow Cytometry - Anti-Proteasome subunit beta type 2/PSMB2 antibody [MCP165] (ab22650)

Overlay histogram showing HeLa cells stained with ab22650 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab22650, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed.

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

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