# abcam

# Product datasheet

# Anti-Proteasome 20S LMP7 antibody ab3329

★★★★★ 12 Abreviews 47 References 4 图像

概述

产**品名称** Anti-Proteasome 20S LMP7抗体

描述 兔多克隆抗体to Proteasome 20S LMP7

**宿主** Rabbit

经测试应用 适用于: WB, ICC

种属反应性 与反应: Human

预测可用于: Sheep, Cow 📤

免疫原 Synthetic peptide corresponding to Human Proteasome 20S LMP7 aa 250-350.

Database link: P28062

Run BLAST with
Run BLAST with

常规说明

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 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.

存储溶液 Constituents: 0.1% BSA, 99% PBS

纯**度** Immunogen affinity purified

**克隆** 多克隆

**同种型** IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab3329于以下的经测试应用

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#### "应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	*** <u>(12)</u>	Use a concentration of 1 - 3 µg/ml. Detects a band of approximately 20 kDa.
ICC		Use a concentration of 5 µg/ml.

#### 靶标

#### 功能

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. Replacement of PSMB5 by PSMB8 increases the capacity of the immunoproteasome to cleave model peptides after hydrophobic and basic residues. Acts as a major component of interferon gamma-induced sensitivity. Plays a key role in apoptosis via the degradation of the apoptotic inhibitor MCL1. May be involved in the inflammatory response pathway. In cancer cells, substitution of isoform 1 (E2) by isoform 2 (E1) results in immunoproteasome deficiency.

#### 疾病相关

Defects in PSMB8 are the cause of JMP syndrome (JMPS) [MIM:613732]; also called joint contractures muscular atrophy microcytic anemia and panniculitis-induced lipodystrophy. JBTS1 is an autoinflammatory disorder characterized by childhood onset of joint stiffness and severe contractures of the hands and feet, erythematous skin lesions with subsequent development of severe lipodystrophy, and laboratory evidence of immune dysregulation. Accompanying features include muscle weakness and atrophy, hepatosplenomegaly, and microcytic anemia.

#### 序列相似性

Belongs to the peptidase T1B family.

发展阶段

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

翻译后修饰

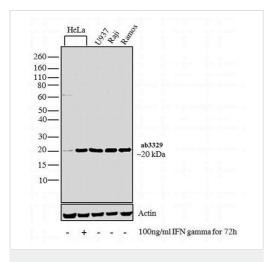
Autocleaved. The resulting N-terminal Thr residue of the mature subunit is responsible for the

nucleophile proteolytic activity.

细胞定位

Cytoplasm. Nucleus.

# 图片



Western blot - Anti-Proteasome 20S LMP7 antibody (ab3329)

All lanes: Anti-Proteasome 20S LMP7 antibody (ab3329) at 2

µg/ml

Lane 1: HeLa whole cell extracts

Lane 2: HeLa treated with IFN gamma (100ng/ml IFN gamma for

72h) whole cell extracts

Lane 3: U-937 whole cell extracts

Lane 4: Raji whole cell extracts

Lane 5: Ramos whole cell extracts

Lysates/proteins at 30 µg per lane.

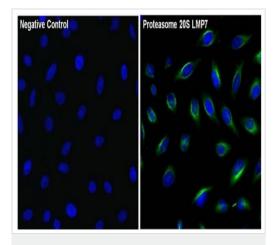
### **Secondary**

All lanes : Goat anti-Rabbit lgG (H+L) HRP conjugate at 1/2500

dilution

Observed band size: 20 kDa

Detected by chemiluminescence.



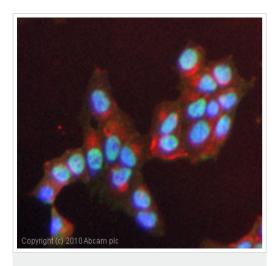
Immunocytochemistry - Anti-Proteasome 20S LMP7 antibody (ab3329)

Immunocytochemistry/ Immunofluorescence analysis of HeLa cells labeling Proteasome 20S LMP7 with ab3329 at 5µg/ml. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.1% Triton X-100 in TBS for 10 minutes, and blocked with 3% Blocker BSA in PBS for 15 minutes at room temperature. Cells were stained with or without Anti-Proteasome 20S LMP7 antibody (ab3329), at a concentration of 5µg/ml for 1 hour at room temperature, and then incubated with a Alexa Fluor<sup>®</sup> 488 goat anti-rabbit IgG secondary antibody at a dilution of 1/1000 for 1 hour s at room temperature (both panels, green). Nuclei (both panels, blue) were stained with Hoechst 33342 dye.



Western blot - Anti-Proteasome 20S LMP7 antibody (ab3329)

Western blot of proteasome 20S LMP7 from HeLa cell extract using ab3329



Immunocytochemistry - Anti-Proteasome 20S LMP7 antibody (ab3329)

ICC/IF image of ab3329 stained MCF7 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab3329,  $5\mu$ g/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 $\mu$ M.

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

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