# abcam

### **Product datasheet**

## Anti-Proteasome 20S LMP7 antibody ab82528

画像数 3

製品の概要	
製品名	Anti-Proteasome 20S LMP7 antibody
製品の詳細	Rabbit polyclonal to Proteasome 20S LMP7
由来種	Rabbit
アプリケーション	<b>適用あり:</b> WB
種交差性	交差種: Human
	交差が予測される動物種: Cow, Pig, Non human primates 🛛 🔺
免疫原	Synthetic peptide corresponding to Human Proteasome 20S LMP7 aa 250 to the C-terminus conjugated to keyhole limpet haemocyanin. Database link: <u>P28062</u> (Peptide available as <u>ab91637</u> )
ポジティブ・コントロール	WB: A549, Jurkat, Raji and U937 cell lysates.
特記事項	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
製品の特性	

製品の状態	Liquid
保存方法	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.
バッファー	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS
	Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

精製度	Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	lgG

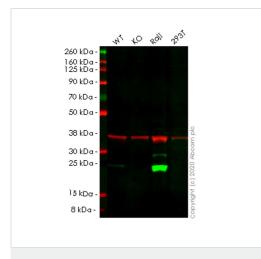
アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab82528の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use a concentration of 1 $\mu$ g/ml. Detects a band of approximately 22 kDa (predicted molecular weight: 30 kDa).

#### ターゲット情報

機能	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.
関連疾患	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.
配列類似性	Belongs to the peptidase T1B family.
発生段階	Highly expressed in immature dendritic cells (at protein level).
翻訳後修飾	Autocleaved. The resulting N-terminal Thr residue of the mature subunit is responsible for the nucleophile proteolytic activity.
細胞内局在	Cytoplasm. Nucleus.



Western blot - Anti-Proteasome 20S LMP7 antibody (ab82528)

All lanes : Anti-Proteasome 20S LMP7 antibody (ab82528) at 1/500 dilution

Lane 1 : Wild-type A549 (Human lung carcinoma cell line) whole cell lysate

Lane 2 : PSMB8 knockout A549 (Human lung carcinoma cell line) whole cell lysate

Lane 3 : Raji (Human Burkitt's lymphoma cell line) whole cell lysate Lane 4 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

Lysates/proteins at 20 µg per lane.

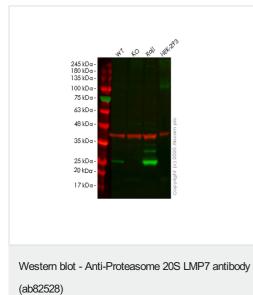
#### Secondary

All lanes : Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) at 1/10000 dilution

Predicted band size: 30 kDa Observed band size: 23 kDa

Lanes 1-4: Merged signal (red and green). Green - ab82528 observed at 23 kDa. Red - loading control <u>ab8245</u> observed at 36 kDa.

ab82528 Anti-Proteasome 20S LMP7 antibody was shown to specifically react with Proteasome 20S LMP7 in wild-type A549 cells. Loss of signal was observed when knockout cell line **ab267149** (knockout cell lysate **ab257130**) was used. Wild-type and Proteasome 20S LMP7 knockout samples were subjected to SDS-PAGE. ab82528 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



**All lanes :** Anti-Proteasome 20S LMP7 antibody (ab82528) at 1/500 dilution

Lane 1 : Wild-type A549 cell lysate Lane 2 : PSMB8 knockout A549 cell lysate Lane 3 : Raji cell lysate Lane 4 : HEK-293 cell lysate

Lysates/proteins at 20 µg per lane.

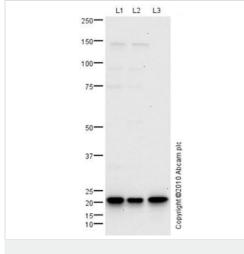
#### Secondary

All lanes : Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) at 1/10000 dilution

Predicted band size: 30 kDa Observed band size: 23 kDa

Lanes 1-4: Merged signal (red and green). Green - ab82528 observed at 23 kDa. Red - loading control <u>ab8245</u> observed at 36 kDa.

ab82528 Anti-Proteasome 20S LMP7 antibody was shown to specifically react with Proteasome 20S LMP7 in wild-type A549 cells. Loss of signal was observed when knockout cell line **ab267148** (knockout cell lysate **ab257129**) was used. Wild-type and Proteasome 20S LMP7 knockout samples were subjected to SDS-PAGE. ab82528 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Proteasome 20S LMP7 antibody (ab82528)

All lanes : Anti-Proteasome 20S LMP7 antibody (ab82528) at 1 µg/ml

Lane 1 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate Lane 2 : Raji (Human Burkitt's lymphoma cell line) Whole Cell Lysate Lane 3 : U937 (Human leukemic monocyte lymphoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 30 kDa Observed band size: 22 kDa Additional bands at: 145 kDa. We are unsure as to the identity of these extra bands.

We hypothesize that the 22 kDa band corresponds to the mature form of Proteasome 20S LMP7.

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

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