

# PSMD11 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2803b

# **Product Information**

Application	WB, IHC-P, E
Primary Accession	<u>000231</u>
Other Accession	<u>F1LMZ8, Q8BG32, Q2KI42</u>
Reactivity	Human, Mouse
Predicted	Bovine, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17375
Calculated MW	47464
Antigen Region	288-317

#### **Additional Information**

Gene ID	5717
Other Names	26S proteasome non-ATPase regulatory subunit 11, 26S proteasome regulatory subunit RPN6, 26S proteasome regulatory subunit S9, 26S proteasome regulatory subunit p445, PSMD11
Target/Specificity	This PSMD11 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 288-317 amino acids from the C-terminal region of human PSMD11.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PSMD11 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **Protein Information**

Name	PSMD11
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. In the complex, PSMD11 is required for proteasome assembly. Plays a key role in increased proteasome activity in embryonic stem cells (ESCs): its high expression in ESCs promotes enhanced assembly of the 26S proteasome, followed by higher proteasome activity.
Cellular Location	Nucleus. Cytoplasm, cytosol
Tissue Location	Highly expressed in embryonic stem cells (ESCs). Expression decreases as ESCs differentiate

# Background

The 26S proteasome (PSMD11) is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. The protein is a non-ATPase subunit of the 19S regulator.

# References

Saito,A., Gene 203 (2), 241-250 (1997) Hoffman,L., FEBS Lett. 404 (2-3), 179-184 (1997)

#### Images



Western blot analysis of PSMD11 Antibody (C-term) (Cat.#AP2803b) in 293, Jurkat cell line lysates (35ug/lane). PSMD11 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with PSMD11 antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





PSMD11 Antibody (C-term) (Cat.#AP2803b) western blot analysis in mouse kidney tissue lysates (35ug/lane).This demonstrates the PSMD11 antibody detected the PSMD11 protein (arrow).

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