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# PSMD4 Antibody (C-term)

**Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP2103b**

## Specification

### PSMD4 Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **WB, IHC-P,E** |
| Primary Accession | P55036 |
| Other Accession | Q58DA0 |
| Reactivity | **Human** |
| Predicted | **Bovine** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Antigen Region | **347-377** |

### PSMD4 Antibody (C-term) - Additional Information

**Gene ID** 5710

**Other Names**
26S proteasome non-ATPase regulatory subunit 4, 26S proteasome regulatory subunit RPN10, 26S proteasome regulatory subunit S5A, Antisecretory factor 1, AF, ASF, Multiubiquitin chain-binding protein, PSMD4, MCB1

**Target/Specificity**
This PSMD4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 347-377 amino acids from the C-terminal region of human PSMD4.

**Dilution**
WB~~1:1000
IHC-P~~1:50~100
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**
PSMD4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### PSMD4 Antibody (C-term) - Protein Information

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**Name** PSMD4

**Synonyms** MCB1

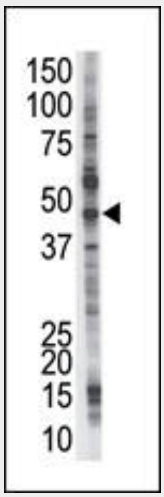
**Function** Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair. PSMD4 acts as an ubiquitin receptor subunit through ubiquitin- interacting motifs and selects ubiquitin-conjugates for destruction. Displays a preferred selectivity for longer polyubiquitin chains.

## PSMD4 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## PSMD4 Antibody (C-term) - Images




The anti-PSMD4 Pab (Cat. #AP2103b) is used in Western blot to detect PSMD4 in Jurkat cell lysate.

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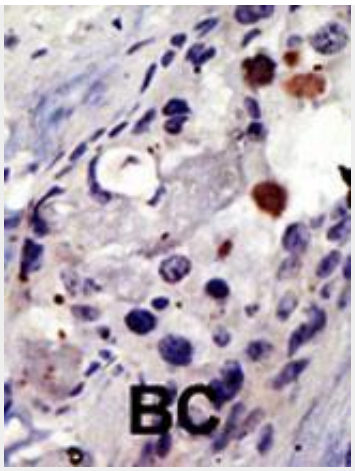


Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

**PSMD4 Antibody (C-term) - Background**

The 26S proteasome 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. PSDM4 one of the non-ATPase subunits of the 19S regulator lid.

**PSMD4 Antibody (C-term) - References**

Walters, K.J., et al., Biochemistry 41(6):1767-1777 (2002).
Kawahara, H., et al., EMBO J. 19(15):4144-4153 (2000).
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Johansson, E., et al., J. Biol. Chem. 270(35):20615-20620 (1995).
Coux, O., et al., Annu. Rev. Biochem. 65, 801-847 (1996).