

**PSMD4 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP2103b****Specification**

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**PSMD4 Antibody (C-term) Blocking Peptide - Product Information**

Primary Accession [P55036](#)  
Other Accession [PSD4\\_HUMAN](#)

**PSMD4 Antibody (C-term) Blocking Peptide - 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**

The synthetic peptide sequence used to generate the antibody [AP2103b](#) was selected from the C-term region of human PSMD4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**PSMD4 Antibody (C-term) Blocking Peptide - Protein Information**

**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) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

## **PSMD4 Antibody (C-term) Blocking Peptide - Images**

## **PSMD4 Antibody (C-term) Blocking Peptide - 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. PSMD4 one of the non-ATPase subunits of the 19S regulator lid.

## **PSMD4 Antibody (C-term) Blocking Peptide - References**

Walters, K.J., et al., Biochemistry 41(6):1767-1777 (2002). Kawahara, H., et al., EMBO J. 19(15):4144-4153 (2000). Tanahashi, N., et al., J. Biol. Chem. 275(19):14336-14345 (2000). Johansson, E., et al., J. Biol. Chem. 270(35):20615-20620 (1995). Coux, O., et al., Annu. Rev. Biochem. 65, 801-847 (1996).