

**PSMD14 Antibody**  
Rabbit mAb  
Catalog # AP92194

## Specification

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### PSMD14 Antibody - Product Information

Application	WB, IHC, ICC
Primary Accession	<a href="#">O00487</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
26S proteasome non-ATPase regulatory subunit 14; PAD1; POH1; Psm14; RPN11;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	34577 Da

### PSMD14 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PSMD14
Description	Metalloprotease component of the 26S proteasome that specifically cleaves 'Lys-63'-linked polyubiquitin chains. The 26S proteasome is involved in the ATP-dependent degradation of ubiquitinated proteins. The function of the 'Lys-63'-specific deubiquitination of the proteasome is unclear.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

### PSMD14 Antibody - Protein Information

**Name** PSMD14

**Synonyms** POH1

#### 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. The PSMD14 subunit is a metalloprotease that specifically cleaves 'Lys-63'-linked

polyubiquitin chains within the complex. Plays a role in response to double-strand breaks (DSBs): acts as a regulator of non-homologous end joining (NHEJ) by cleaving 'Lys-63'-linked polyubiquitin, thereby promoting retention of JMJD2A/KDM4A on chromatin and restricting TP53BP1 accumulation. Also involved in homologous recombination repair by promoting RAD51 loading.

#### Tissue Location

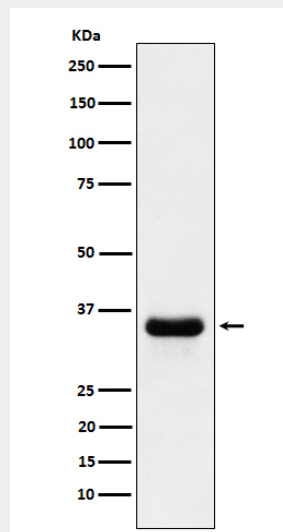
Widely expressed. Highest levels in heart and skeletal muscle.

#### PSMD14 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### PSMD14 Antibody - Images



Western blot analysis of PSMD14 expression in HeLa cell lysate.