

**PSME4 Antibody (N-Term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP21982a**

**Specification**

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**PSME4 Antibody (N-Term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q14997</a>
Other Accession	<a href="#">F1MKX4</a>
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	211334

**PSME4 Antibody (N-Term) - Additional Information**

**Gene ID** 23198

**Other Names**

Proteasome activator complex subunit 4, Proteasome activator PA200, PSME4, KIAA0077

**Target/Specificity**

This PSME4 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 503-535 amino acids from human PSME4.

**Dilution**

WB~~1:2000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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**

PSME4 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

**PSME4 Antibody (N-Term) - Protein Information**

**Name** PSME4 ([HGNC:20635](#))

**Function** Associated component of the proteasome that specifically recognizes acetylated

histones and promotes ATP- and ubiquitin- independent degradation of core histones during spermatogenesis and DNA damage response. Recognizes and binds acetylated histones via its bromodomain-like (BRDL) region and activates the proteasome by opening the gated channel for substrate entry. Binds to the core proteasome via its C-terminus, which occupies the same binding sites as the proteasomal ATPases, opening the closed structure of the proteasome via an active gating mechanism. Component of the spermatoproteasome, a form of the proteasome specifically found in testis: binds to acetylated histones and promotes degradation of histones, thereby participating actively to the exchange of histones during spermatogenesis. Also involved in DNA damage response in somatic cells, by promoting degradation of histones following DNA double-strand breaks.

#### Cellular Location

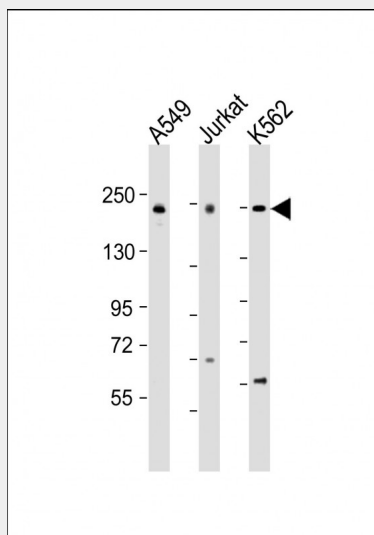
Cytoplasm, cytosol. Nucleus. Nucleus speckle Note=Found in nuclear foci following treatment with ionizing radiation, but not with ultraviolet irradiation or H<sub>2</sub>O<sub>2</sub>

#### PSME4 Antibody (N-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 Cytometry](#)
- [Cell Culture](#)

#### PSME4 Antibody (N-Term) - Images



All lanes : Anti-PSME4 Antibody (N-Term) at 1:2000 dilution Lane 1: A549 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 211 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

#### PSME4 Antibody (N-Term) - Background

Associated component of the proteasome that specifically recognizes acetylated histones and promotes ATP- and ubiquitin- independent degradation of core histones during spermatogenesis and DNA damage response. Recognizes and binds acetylated histones via its bromodomain-like (BRDL) region and activates the proteasome by opening the gated channel for substrate entry. Binds to the core proteasome via its C-terminus, which occupies the same binding sites as the proteasomal ATPases, opening the closed structure of the proteasome via an active gating mechanism. Component of the spermatoproteasome, a form of the proteasome specifically found in testis: binds to acetylated histones and promotes degradation of histones, thereby participating actively to the exchange of histones during spermatogenesis. Also involved in DNA damage response in somatic cells, by promoting degradation of histones following DNA double-strand breaks.

#### **PSME4 Antibody (N-Term) - References**

Blickwedehl J.,et al.Submitted (JAN-2005) to the EMBL/GenBank/DDBJ databases.  
Nomura N.,et al.DNA Res. 1:223-229(1994).  
Ustrell V.,et al.EMBO J. 21:3516-3525(2002).  
Wang X.,et al.Biochemistry 46:3553-3565(2007).  
Dephoure N.,et al.Proc. Natl. Acad. Sci. U.S.A. 105:10762-10767(2008).

#### **PSME4 Antibody (N-Term) - Citations**

- [Bortezomib-inducible long non-coding RNA myocardial infarction associated transcript is an oncogene in multiple myeloma that suppresses miR-29b.](#)