

**Goat Anti-PSME1 (isoform 1) Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1873a

## Specification

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### Goat Anti-PSME1 (isoform 1) Antibody - Product Information

Application	WB
Primary Accession	<a href="#">Q06323</a>
Other Accession	<a href="#">NP_006254</a> , <a href="#">5720</a> , <a href="#">19186 (mouse)</a> , <a href="#">29630 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	28723

### Goat Anti-PSME1 (isoform 1) Antibody - Additional Information

Gene ID 5720

#### Other Names

Proteasome activator complex subunit 1, 11S regulator complex subunit alpha, REG-alpha, Activator of multicatalytic protease subunit 1, Interferon gamma up-regulated I-5111 protein, IGUP I-5111, Proteasome activator 28 subunit alpha, PA28a, PA28alpha, PSME1, IFI5111

#### Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

Goat Anti-PSME1 (isoform 1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-PSME1 (isoform 1) Antibody - Protein Information

Name PSME1

Synonyms IFI5111

#### Function

Implicated in immunoproteasome assembly and required for efficient antigen processing. The PA28 activator complex enhances the generation of class I binding peptides by altering the

cleavage pattern of the proteasome.

### Goat Anti-PSME1 (isoform 1) 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](#)

### Goat Anti-PSME1 (isoform 1) Antibody - Images



AF1873a (0.3  $\mu\text{g/ml}$ ) staining of Human Peripheral Blood Mononucleocyte lysate (35  $\mu\text{g}$  protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-PSME1 (isoform 1) Antibody - 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. The immunoproteasome contains an alternate regulator, referred to as the 11S regulator or PA28, that replaces the 19S regulator. Three subunits (alpha, beta and gamma) of the 11S regulator have been identified. This gene encodes the alpha subunit of the 11S regulator, one of the two 11S subunits that is induced by gamma-interferon. Three alpha and three beta subunits combine to form a heterohexameric ring. Two transcripts encoding different isoforms have been identified.

### Goat Anti-PSME1 (isoform 1) Antibody - References

Characterization of the ubiquitin-proteasome system in bortezomib-adapted cells. Ruckrich T, et al. *Leukemia*, 2009 Jun. PMID 19225532.

Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.

Specific MALDI imaging and profiling for biomarker hunting and validation: fragment of the 11S proteasome activator complex, Reg alpha fragment, is a new potential ovary cancer biomarker. Lemaire R, et al. J Proteome Res, 2007 Nov. PMID 17939699.

Subtractive hybridisation screen identifies genes regulated by glucose deprivation in human neuroblastoma cells. Kobayashi K, et al. Brain Res, 2007 Sep 19. PMID 17719568.

Proteomic identification of down-regulation of oncoprotein DJ-1 and proteasome activator subunit 1 in hepatitis B virus-infected well-differentiated hepatocellular carcinoma. Zhang D, et al. Int J Oncol, 2007 Sep. PMID 17671684.