

**PSME3 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP2942a****Specification**

---

**PSME3 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [P61289](#)**PSME3 Antibody (N-term) Blocking Peptide - Additional Information**

Gene ID 10197

**Other Names**

Proteasome activator complex subunit 3, 11S regulator complex subunit gamma, REG-gamma, Activator of multicatalytic protease subunit 3, Ki nuclear autoantigen, Proteasome activator 28 subunit gamma, PA28g, PA28gamma, PSME3

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP2942a](/products/AP2942a) was selected from the N-term region of human PSME3. 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.

**PSME3 Antibody (N-term) Blocking Peptide - Protein Information**

Name PSME3

**Function**

Subunit of the 11S REG-gamma (also called PA28-gamma) proteasome regulator, a doughnut-shaped homoheptamer which associates with the proteasome. 11S REG-gamma activates the trypsin-like catalytic subunit of the proteasome but inhibits the chymotrypsin-like and postglutamyl-preferring (PGPH) subunits. Facilitates the MDM2-p53/TP53 interaction which promotes ubiquitination- and MDM2-dependent proteasomal degradation of p53/TP53, limiting its accumulation and resulting in inhibited apoptosis after DNA damage. May also be involved in cell cycle regulation. Mediates CCAR2 and CHEK2-dependent SIRT1 inhibition (PubMed: <http://www.uniprot.org/citations/25361978>).

**Cellular Location**

Nucleus. Cytoplasm. Note=Localizes to the cytoplasm during mitosis following nuclear envelope breakdown at this distinct stage of the cell cycle which allows its interaction with MAP3K3 kinase.

### **PSME3 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **PSME3 Antibody (N-term) Blocking Peptide - Images**

### **PSME3 Antibody (N-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. 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.

### **PSME3 Antibody (N-term) Blocking Peptide - References**

Kohda, K., et al., J. Immunol. 160 (10), 4923-4935 (1998) Pratt, G. et al., J. Biol. Chem. 283 (19), 12919-12925 (2008)