

PSME3 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP2942b**Specification****PSME3 Antibody (C-term) Blocking Peptide -
Product Information**Primary Accession [P61289](#)**PSME3 Antibody (C-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 AP2942b
was selected from the C-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 (C-term) Blocking Peptide -
Protein Information****PSME3 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. 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 (C-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)

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: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 (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)