

Rabbit PSME3 Polyclonal Antibody | anti-PSME3 antibody

PSME3 Antibody

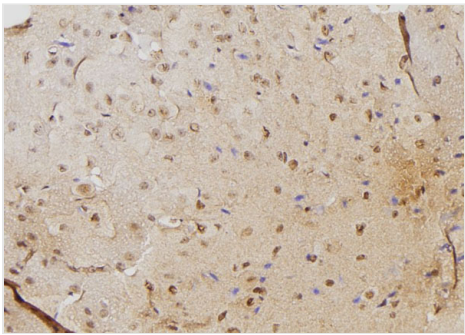
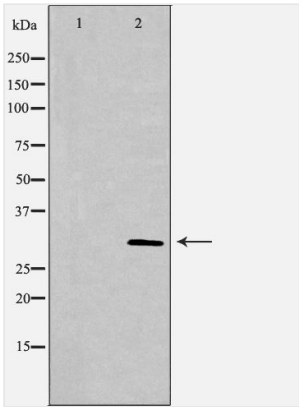
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA325871	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PSME3; Polyclonal Antibody; PSME3 Antibody; 11S regulator complex gamma subunit; 11S regulator complex subunit gamma; Activator of multicatalytic protease subunit 3; Ki; Ki antigen; Ki nuclear autoantigen; PA28 gamma; PA28g; PA28gamma; Proteasome (prosome; macropain) activator subunit 3 (PA28 gamma; Ki); macropain) activator subunit 3; Proteasome activator 28 gamma; Proteasome activator 28 subunit gamma; Proteasome activator complex subunit 3; Proteasome activator subunit 3; PSME3_HUMAN; REG GAMMA; REG-gamma; anti-PSME3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PSME3 antibody detects endogenous levels of total PSME3
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	254
Applicable Applications for anti-PSME3 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PSME3
Subcellular Location	Nucleus. Cytoplasm. 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.
Tissue Specificity	Up-regulated in thyroid carcinoma cells.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (91%), Xenopus (82%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



IHC (Immunohistochemistry)
AAA325871 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

WB (Western Blot)
Western blot analysis of Hela whole cell lysates, using PSME3 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-PSME3 antibody

Description: The 20S proteasome is the major proteolytic enzyme complex involved in intracellular protein degradation. PA700, PA28, and PA200 are three major protein complexes that function as activators of the 20S proteasome. There are three evolutionarily conserved subunits of PA28: PA28alpha (PSME1), PA28beta (PSME2), and PA28gamma (PSME3) (1, 2). PA28alpha and PA28beta form a heteroheptameric complex and function by binding to the 20S complex at its opening site(s). The PA28alpha/beta complex is present throughout the cell and participates in MHC class I antigen presentation by promoting the generation of antigenic peptides from foreign proteins (2). PA28gamma exists in the form of a homoheptamer and is mainly located in the nucleus. The PA28gamma complex exerts its function by binding and guiding specific nuclear target proteins to the 20S proteasome for further degradation (3, 4).

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).

Subunit Structure: Homoheptamer; the stability of the heptamer is essential for the specific activation of the trypsin-like subunit and inhibition of the chymotrypsin-like and postglutamyl-preferring (PGPH) subunits of the proteasome. Interacts with p53/TP53 and MDM2. Interacts with MAP3K3 (By similarity). Associates with the proteasome. Interacts with human cytomegalovirus UL27. Interacts with CCAR2.

Post-translational Modifications: Phosphorylated by MAP3K3 (By similarity). Phosphorylation at Ser-247 promotes its association with CCAR2. Acetylation at the major site Lys-195 is important for oligomerization and ability to degrade its target substrates. Deacetylated by SIRT1.

Similarity: The C-terminal sequences affect heptamer stability and proteasome affinity. Belongs to the PA28 family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	30410794
NCBI GeneID	10197
NCBI Accession #	NP_005780.2
NCBI GenBank Nucleotide #	NM_005789.3
UniProt Accession #	P61289; O35563; P97373; Q12920; Q13172; Q9BQD9; A8K9A3
Molecular Weight	Observed: 30 kDa Predicted: 30 kDa
NCBI Official Full Name	proteasome activator complex subunit 3 isoform 1
NCBI Official Synonym Full Names	proteasome activator subunit 3

NCBI Official Symbol	PSME3
NCBI Official Synonym Symbols	Ki; PA28G; HEL-S-283; PA28gamma; REG-GAMMA; PA28-gamma
NCBI Protein Information	proteasome activator complex subunit 3
UniProt Protein Name	Proteasome activator complex subunit 3
UniProt Gene Name	PSME3
UniProt Synonym Gene Names	REG-gamma; PA28g; PA28gamma

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/psme3-antibody-immunohistochemistry-western-blot-elisa/325871>