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PSME3 Rabbit pAb

Catalog # AP98527

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P61289
Other Accession	P61289
Reactivity	Rat, Human, Mouse
Predicted	Pig, Rabbit, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	29506
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PSME3
Epitope Specificity	201-254/254
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBUNIT	Homoheptamer; the stability of the heptamer is essential for the specific activation of the trypsine-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 CCAR2. Interacts with FAM192A (via C-terminus); the interaction is direct and promotes the association of PSME3 with the 20S proteasome (PubMed:29934401). Interacts with COIL; the interaction is inhibited by FAM192A (PubMed:29934401).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Subunit of the 11S REG-gamma (also called PA28-gamma) proteasome regulator, a donut-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-TP53/p53 interaction which promotes ubiquitination- and MDM2-dependent proteasomal degradation of TP53/p53, limiting its accumulation and resulting in inhibited apoptosis after DNA damage. May also be involved in cell cycle regulation.

Additional Information

Gene ID	10197
Other Names	HEL-S-283; Ki; PA28-gamma; PA28G; PA28gamma; REG-GAMMA; REGgamma; Ab2-371; PSME3_CHICK; PSME3; Activator of multicatalytic protease subunit 3; Proteasome activator 28 subunit gamma (PA28g | PA28gamma); PSME3_HUMAN; 11S regulator complex subunit gamma (REG-gamma); Ki nuclear autoantigen; PSME3_MOUSE; PSME3_PIG; proteasome activator subunit 3; proteasome (prosome, macropain) activator subunit 3 (PA28

	gamma; Ki)
Dilution	IHC-P=1:200-500,IHC-F=1:200-500,IF=1:200-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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: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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.