



# PA28 $\gamma$ Monoclonal Antibody

<b>Catalog No</b>	YP-Ab-03439
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Dog;Pig
<b>Applications</b>	WB;IF
<b>Gene Name</b>	PSME3
<b>Protein Name</b>	Proteasome activator complex subunit 3
<b>Immunogen</b>	Purified recombinant human PA28 $\gamma$ protein fragments expressed in E.coli.
<b>Specificity</b>	PA28 $\gamma$ Monoclonal Antibody detects endogenous levels of PA28 $\gamma$ protein.
<b>Formulation</b>	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	Affinity purification
<b>Dilution</b>	Western Blot: 1/1000 - 1/2000. Immunofluorescence: 1/100 - 1/500. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	$\geq 90\%$
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	PSME3; 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
<b>Observed Band</b>	
<b>Cell Pathway</b>	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. .
<b>Tissue Specificity</b>	B-cell,Embryonic kidney,Fetal brain,Human endometrium carcinoma cell line,L
<b>Function</b>	disease:Sera from patients with systemic lupus erythematosus often contain antibodies that react with the Ki antigen.,domain:The C-terminal sequences affect heptamer stability and proteasome affinity.,function: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.,induction:Up-regulated in thyroid carcinoma cells.,PTM:Phosphorylated by MAP3K3.,similarity:Belongs to the PA28



family.,subcellular lo

### 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) o

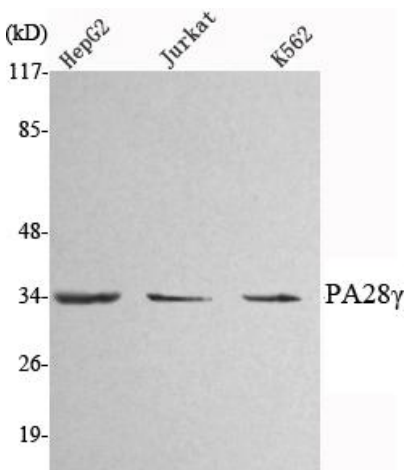
### matters needing attention

Avoid repeated freezing and thawing!

### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis using PA28 $\gamma$  Monoclonal Antibody against HepG2, Jurkat, K562 cell lysate.