



# PA28γ Monoclonal Antibody

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|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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>Immunogen</b>                   | Purified recombinant human PA28γ protein fragments expressed in E.coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Specificity</b>                 | PA28γ Monoclonal Antibody detects endogenous levels of PA28γ 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>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Synonyms</b>                    | PA28γ;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>Calculated Molecular Weight</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

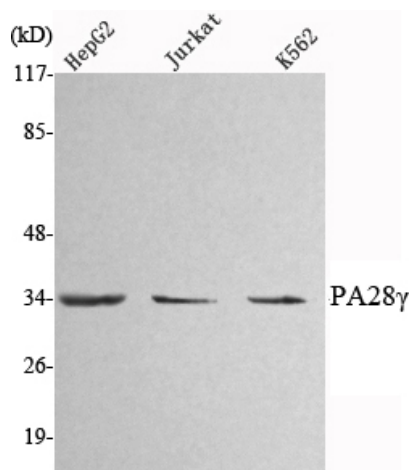
## matters needing attention

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 PA28γ Monoclonal Antibody against HepG2, Jurkat, K562 cell lysate.