

Rabbit PSME1 Polyclonal Antibody | anti-PSME1 antibody

Anti-PSME1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127244	Rabbit	Human, Mouse, Rat	Western Blot, Immunofluorescence, Immunocytochemistry, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

PSME1; Polyclonal Antibody; Anti-PSME1 Antibody Picoband; solute carrier family 12 member 5; Solute carrier family 12 member 5; Electroneutral potassium-chloride cotransporter 2; K-Cl cotransporter 2; hKCC2; Neuronal K-Cl cotransporter; SLC12A5; KCC2; KIAA1176; anti-PSME1 antibody

PRODUCT SPECIFICATIONS

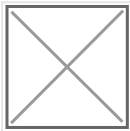
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Brain specific. Detected in neuronal cells.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-PSME1 antibody	WB (Western Blot), IF (Immunofluorescence), ICC (Immunocytochemistry), FCM/FACS (Flow Cytometry), ELISA
Immunogen	E coli-derived human PSME1 recombinant protein (Position: M1-Y249).
Subcellular Localization	Membrane. Multi-pass membrane protein.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Mediates electroneutral potassium-chloride cotransport in mature neurons and is required for neuronal Cl ⁻ homeostasis. As major extruder of intracellular chloride, it establishes the low neuronal Cl ⁻ levels required for chloride influx after binding of GABA-A and glycine to their receptors, with subsequent hyperpolarization and neuronal inhibition. Involved in the regulation of dendritic spine formation and maturation.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 3. Flow Cytometry analysis of JK cells using anti-PSME1 antibody (AAA127244).Overlay histogram showing JK cells stained with AAA127244 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PSME1 Antibody (AAA127244, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)
Figure 2. IF analysis of PSME1 using anti-PSME1 antibody (AAA127244).PSME1 was detected in an immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-PSME1 Antibody (AAA127244) overnight at 4 degree C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)
Figure 1. Western blot analysis of PSME1 using anti-PSME1 antibody (AAA127244).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human Raji whole cell lysates,Lane 2: human A431 whole cell lysates,Lane 3: rat liver tissue lysates,Lane 4: rat spleen tissue lysates,Lane 5: rat RH35 whole cell lysates,Lane 6: mouse liver tissue lysates,Lane 7: mouse spleen tissue lysates,Lane 8: mouse RAW264.7 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PSME1 antigen affinity purified polyclonal antibody (#AAA127244) at 0.25ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PSME1 at approximately 30 kDa. The expected band size for PSME1 is at 29 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PSME1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-PSME1 antibody	Primary Antibodies; Neuroscience; Neurotransmission; Potassium Channels; Receptors/Channels
References	1. Belich, M. P., Glynn, R. J., Senger, G., Sheer, D., Trowsdale, J. Proteasome components with reciprocal expression to that of the MHC-encoded LMP proteins. Curr. Biol. 4: 769-776, 1994. 2. Honore, B., Leffers, H., Madsen, P., Celis, J. E. Interferon-gamma up-regulates a unique set of proteins in human keratinocytes: molecular cloning and expression of the cDNA encoding the RGD-sequence-containing protein IGUP I5111. Europ. J. Biochem. 218: 421-430, 1993.3. McCusker, D., Jones, T., Sheer, D., Trowsdale, J. Genetic relationships of the genes encoding the human proteasome beta subunits and the proteasome PA28 complex. Genomics 45: 362-367, 1997.

NCBI AND UNIPROT INFORMATION

NCBI GI #	528078353
NCBI GeneID	5720
NCBI Accession #	NP_001268457.1
NCBI GenBank Nucleotide #	NM_001281528.1
UniProt Accession #	Q06323; Q6IBM2; Q9UEF4; A6NJG9; H0YNE3

Molecular Weight	26,870 Da
NCBI Official Full Name	proteasome activator complex subunit 1 isoform 3
NCBI Official Synonym Full Names	proteasome (prosome, macropain) activator subunit 1 (PA28 alpha)
NCBI Official Symbol	PSME1
NCBI Official Synonym Symbols	PA28A; IFI5111; REGalpha; PA28alpha
NCBI Protein Information	proteasome activator complex subunit 1; 11S regulator complex subunit alpha; 29-kD MCP activator subunit; IGUP I-5111; activator of multicatalytic protease subunit 1; interferon gamma up-regulated I-5111 protein; interferon-gamma IEF SSP 5111; interferon-
UniProt Protein Name	Proteasome activator complex subunit 1
UniProt Gene Name	PSME1
UniProt Synonym Gene Names	IFI5111; REG-alpha; IGUP I-5111; PA28a; PA28alpha
UniProt Entry Name	PSME1_HUMAN

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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