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PSMB8 Recombinant Mouse mAb

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Catalog # AP94385

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC
Host	Rabbit
Clonality	Recombinant
Physical State	Liquid
Isotype	IgG1, Kappa
Purity	affinity purified by Protein G
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Nucleus.
SIMILARITY	Belongs to the peptidase T1B family.
SUBUNIT	The 26S proteasome consists of a 20S proteasome core and two 19S regulatory subunits. The 20S proteasome core is composed of 28 subunits that are arranged in four stacked rings, resulting in a barrel-shaped structure. The two end rings are each formed by seven alpha subunits, and the two central rings are each formed by seven beta subunits. The catalytic chamber with the active sites is on the inside of the barrel. This subunit is part of the immunoproteasome where it displaces the equivalent housekeeping subunit PSMB5. Directly interacts with POMP. Interacts with HIV-1 TAT protein. Interacts with TAP1.
Post-translational modifications	Autocleaved. The resulting N-terminal Thr residue of the mature subunit is responsible for the nucleophile proteolytic activity.
DISEASE	Defects in PSMB8 are the cause of Nakajo syndrome (NKJO) [MIM:256040]; also called joint contractures muscular atrophy microcytic anemia and panniculitis-induced lipodystrophy. An autosomal recessive autoinflammatory disorder characterized by childhood onset of recurrent fever, joint stiffness and severe contractures of the hands and feet, erythematous skin lesions with subsequent development of lipodystrophy, and laboratory evidence of immune dysregulation. Accompanying features include muscle weakness and atrophy, hepatosplenomegaly, and microcytic anemia. Note=Mutation Met-75 has been found in chronic atypical neutrophilic dermatosis with lipodystrophy and elevated temperature syndrome (CANDLE syndrome). CANDLE patients have some overlapping features with NKJO patients, including a cutaneous eruption and lipodystrophy. They show a characteristic neutrophilic dermatosis with a mononuclear interstitial infiltrate in the dermis that seems pathognomonic for CANDLE syndrome (PubMed:21953331).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. The core structure 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. 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. This gene encodes a member of the proteasome B-type family, also known as the T1B family, that is a 20S core beta subunit. This gene is located in the class II region of the MHC (major histocompatibility complex). Expression of this gene is induced by gamma interferon and this gene product replaces catalytic subunit 3 (proteasome beta 5 subunit) in the immunoproteasome. Proteolytic processing is required to generate a mature subunit. Two alternative transcripts encoding two isoforms have been identified; both isoforms are processed to yield the same mature subunit. [provided by RefSeq, Jul 2008].

Additional Information

Target/Specificity	Highly expressed in immature dendritic cells (at protein level).
Dilution	WB=1:500-1:1000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:50,IF=0
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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.

Background

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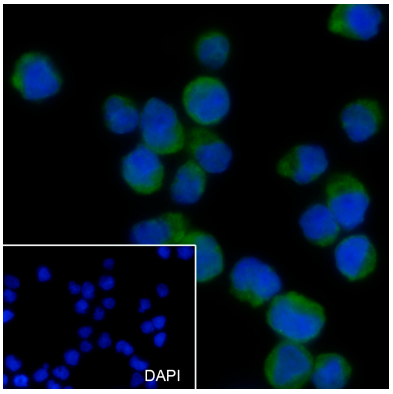
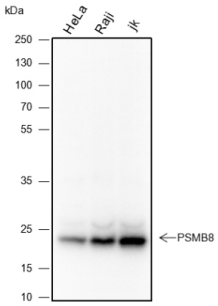
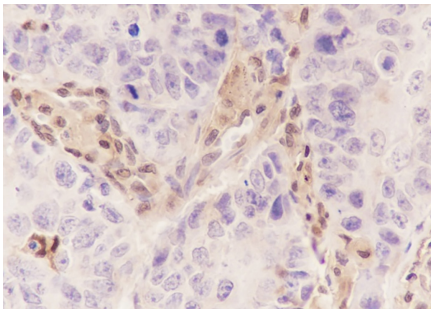
Images



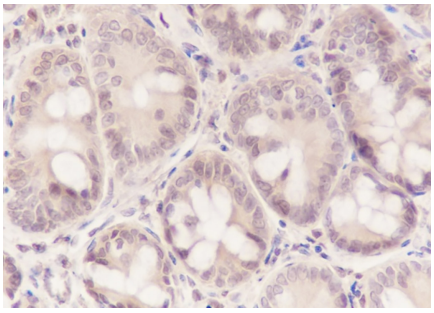
Cell line: Raji Fixative: 4% Paraformaldehyde Permeabilization: 0.1% TritonX-100 Primary ab dilution: 1:50 Primary incubation condition: 4°C overnight Secondary ab: Goat Anti-Rabbit IgG Nuclear counter stain: DAPI (Blue) Comment: Color green is the positive signal for AP94385



Blocking buffer: 5% NFDM/TBST Primary ab dilution: 1:1000 Primary ab incubation condition: 2 hours at room temperature Secondary ab: Goat Anti-Rabbit IgG H&L (HRP) Lysate: HeLa, Raji, Jurkat Protein loading quantity: 20 µg Exposure time: 1 s Predicted MW: 23 kDa Observed MW: 23 kDa



Tissue: Human lung squamous cancer Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:100 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Mouse)(sp-0024) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94385



Tissue: Rat colon Section type: Formalin fixed & Paraffin -embedded section Retrieval method: High temperature and high pressure Retrieval buffer: Tris/EDTA buffer, pH 9.0 Primary ab dilution: 1:100 Primary ab incubation condition: 1 hour at room temperature Secondary ab: SP Kit(Mouse)(sp-0024) Counter stain: Hematoxylin (Blue) Comment: Color brown is the positive signal for AP94385