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PSME1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5255b

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q06323
Other Accession	Q63797, Q64L94, P97371, P58238, Q4U5R3
Reactivity	Human
Predicted	Bovine, Monkey, Mouse, Pig, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21015
Calculated MW	28723
Antigen Region	220-249

Additional Information

Gene ID	5720
Other Names	Proteasome activator complex subunit 1, 11S regulator complex subunit alpha, REG-alpha, Activator of multicatalytic protease subunit 1, Interferon gamma up-regulated I-5111 protein, IGUP I-5111, Proteasome activator 28 subunit alpha, PA28a, PA28alpha, PSME1, IFI5111
Target/Specificity	This PSME1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 220-249 amino acids from the C-terminal region of human PSME1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PSME1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PSME1

Synonyms IFI5111

Function Implicated in immunoproteasome assembly and required for efficient antigen processing. The PA28 activator complex enhances the generation of class I binding peptides by altering the cleavage pattern of the proteasome.

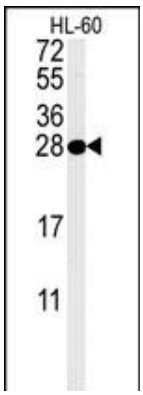
Background

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) of the 11S regulator have been identified. This gene encodes the alpha subunit of the 11S regulator, one of the two 11S subunits that is induced by gamma-interferon. Three alpha and three beta subunits combine to form a heterohexameric ring.

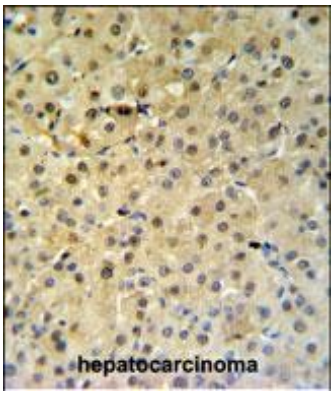
References

Ruckrich, T., et al. Leukemia 23(6):1098-1105(2009) Lemaire, R., et al. J. Proteome Res. 6(11):4127-4134(2007) Kobayashi, K., et al. Brain Res. 1170, 129-139 (2007)

Images

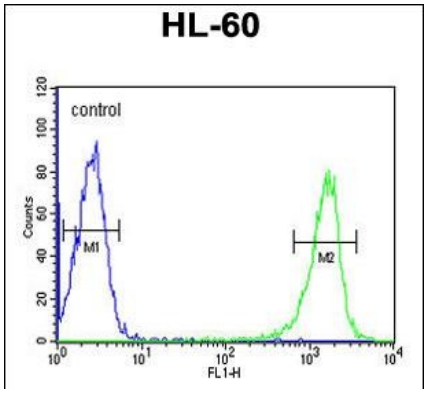


PSME1 Antibody (C-term) (Cat. #AP5255b) western blot analysis in HL-60 cell line lysates (35ug/lane). This demonstrates the PSME1 antibody detected the PSME1 protein (arrow).



PSME1 Antibody (C-term) (Cat. #AP5255b) IHC analysis in formalin fixed and paraffin embedded hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the PSME1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

PSME1 Antibody (C-term) (Cat. #AP5255b) flow cytometric analysis of HL-60 cells (right histogram) compared to a



negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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