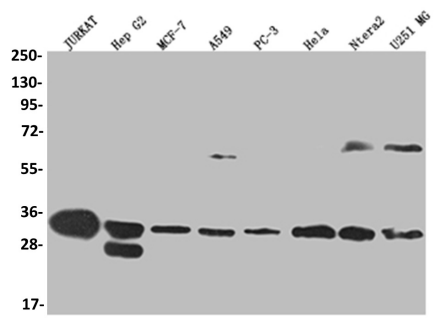
RecomAb™

PSME1 recombinant monoclonal antibody, clone 29D5

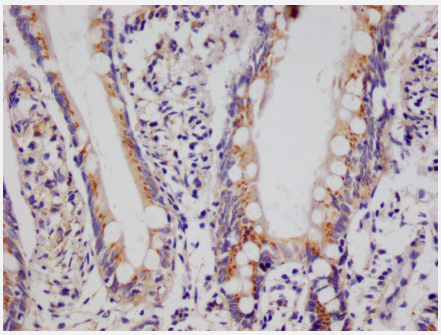
Catalog # RAB07578 Size 100 uL

Applications



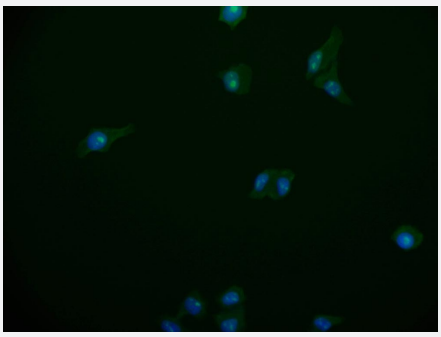
Western Blot (Cell lysate)

Western blot analysis of Jurkat whole cell lysate, HepG2 whole cell lysate, MCF-7 whole cell lysate, A549 whole cell lysate, PC3 whole cell lysate, Hela whole cell lysate, Ntera-2 whole cell lysate, U251 whole cell lysate with PSME1 recombinant monoclonal antibody, clone 29D5 (Cat # RAB07578).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human small intestine tissue using PSME1 recombinant monoclonal antibody, clone 29D5 (Cat # RAB07578) on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence

Immunofluorescent staining of HepG2 Cells with PSME1 recombinant monoclonal antibody, clone 29D5 (Cat # RAB07578), counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 518-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).

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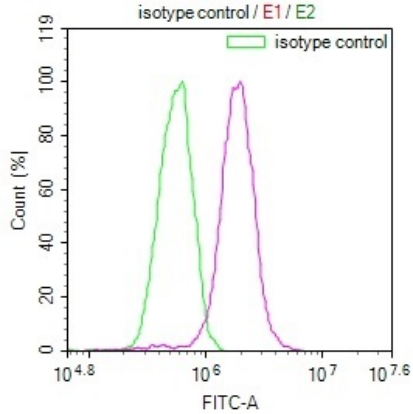

Flow Cytometry

Flow cytometry shows HepG2 cells stained with PSME1 recombinant monoclonal antibody, clone 29D5 (Cat # RAB07578)(red line). The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1*10^{6}cells) for 45min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4°C. Control antibody (green line) was rabbit IgG (1ug/1*10^{6}cells) used under the same conditions. Acquisition of >10,000 events was performed.

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human PSME1.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide corresponding to human PSME1.
Theoretical MW (kDa)	Calculated MW: 29, 2
Reactivity	Human
Form	Liquid
Purification	Affinity chromatography purification
Isotype	IgG
Recommend Usage	ELISA Flow Cytometry(1:50-1:200) Immunofluorescence (1:50-1:200) Immunohistochemistry (1:50-1:200) Western Blot (1:500-1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH7.4 (150 mM NaCl, 0.02% sodium azide and 50% glycerol)
Storage Instruction	Store at -20°C or -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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Applications

- Western Blot (Cell lysate)

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- Immunofluorescence

  Immunofluorescent staining of HepG2 Cells with PSME1 recombinant monoclonal antibody, clone 29D5 (Cat # RAB07578), counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 518-congugated AffiniPure Goat Anti-Rabbit IgG(H+L).

- Enzyme-linked Immunoabsorbent Assay

- Flow Cytometry

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Gene Info — PSME1

Entrez GeneID	5720
Protein Accession#	Q06323
Gene Name	PSME1
Gene Alias	IFI5111, MGC8628, PA28A, PA28alpha, REGalpha
Gene Description	proteasome (prosome, macropain) activator subunit 1 (PA28 alpha)
Omim ID	600654

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Gene Ontology	Hyperlink
Gene Summary	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. Two transcripts encoding different isoforms have been identified. [provided by RefSeq
Other Designations	11S regulator complex alpha subunit|29-kD MCP activator subunit|activator of multicatalytic protease subunit 1|interferon gamma up-regulated I-5111 protein|interferon-gamma IEF SSP 5111|interferon-gamma-inducible protein 5111|proteasome activator subunit

Pathway

- Antigen processing and presentation
- Proteasome

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