

### PSMB8 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant PSMB8. Catalog # AT3463a

#### **Specification**

## PSMB8 Antibody (monoclonal) (M01) - Product Information

Application **Primary Accession** Other Accession Reactivity Host Clonality Isotype Calculated MW

WB, IHC, IF, IP, E P28062 BC001114 Human Mouse **Monoclonal** IgG2a Kappa 30354

## PSMB8 Antibody (monoclonal) (M01) - Additional Information

**Gene ID** 5696

**Other Names** 

Proteasome subunit beta type-8, Low molecular mass protein 7, Macropain subunit C13, Multicatalytic endopeptidase complex subunit C13, Proteasome component C13, Proteasome subunit beta-5i, Really interesting new gene 10 protein, PSMB8, LMP7, PSMB5i, RING10, Y2

# **Target/Specificity** PSMB8 (AAH01114, 173 a.a. ~ 272 a.a) partial recombinant protein with GST tag. MW of the GST

tag alone is 26 KDa.

Dilution WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 IP~~N/A  $E \sim \sim N/A$ 

Format Clear, colorless solution in phosphate buffered saline, pH 7.2.

Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions** 

PSMB8 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

### PSMB8 Antibody (monoclonal) (M01) - Protocols



Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## PSMB8 Antibody (monoclonal) (M01) - Images



Immunofluorescence of monoclonal antibody to PSMB8 on HeLa cell. [antibody concentration 10 ug/ml]



Immunoprecipitation of PSMB8 transfected lysate using anti-PSMB8 monoclonal antibody and Protein A Magnetic Bead (<u>U0007</u>), and immunoblotted with PSMB8 MaxPab rabbit polyclonal antibody.





Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



Western Blot analysis of PSMB8 expression in transfected 293T cell line by PSMB8 monoclonal antibody (M01), clone 1B3.

Lane 1: PSMB8 transfected lysate(29.8 KDa). Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to PSMB8 on formalin-fixed paraffin-embedded human colon. [antibody concentration 3 ug/ml]





Detection limit for recombinant GST tagged PSMB8 is approximately 1ng/ml as a capture antibody.

## PSMB8 Antibody (monoclonal) (M01) - Background

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.

### PSMB8 Antibody (monoclonal) (M01) - References

1.Endoplasmic reticulum stress activates autophagy but not the proteasome in neuronal cells: implications for Alzheimer's disease.Nijholt DA, de Graaf TR, van Haastert ES, Oliveira AO, Berkers CR, Zwart R, Ovaa H, Baas F, Hoozemans JJ, Scheper W.Cell Death Differ. 2011 Jan 21. [Epub ahead of print]