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PSMB8 Antibody (monoclonal) (M01)

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

Product Information

Application	WB, IHC, IF, IP, E
Primary Accession	P28062
Other Accession	BC001114
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1B3
Calculated MW	30354

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~~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.

Background

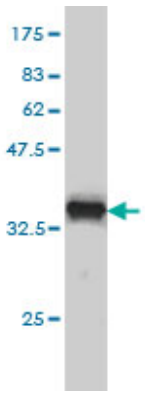
The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. The core structure is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. Proteasomes are distributed throughout 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.

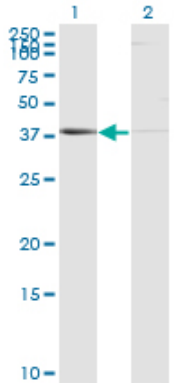
References

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]

Images

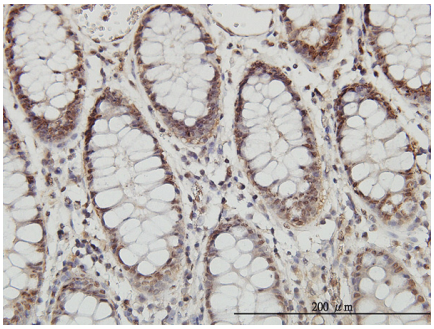


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



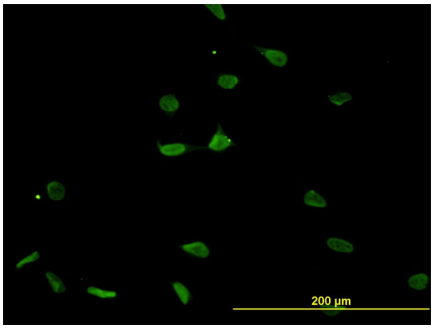
Western Blot analysis of PSMB8 expression in transfected 293T cell line by PSMB8 monoclonal antibody (M01), clone 1B3.

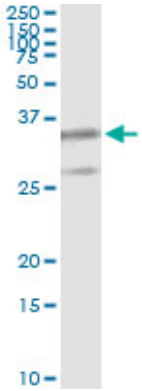
Lane 1: PSMB8 transfected lysate(29.8 KDa).
Lane 2: Non-transfected lysate.



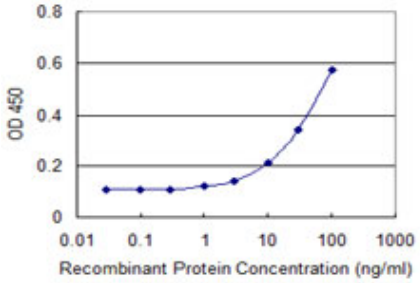
Immunoperoxidase of monoclonal antibody to PSMB8 on formalin-fixed paraffin-embedded human colon. [antibody concentration 3 ug/ml]

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 (U0007), and immunoblotted with PSMB8 MaxPab rabbit polyclonal antibody.



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

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