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PSMD10 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant PSMD10.
Catalog # AT3468a

Product Information

Application	WB, IHC, IF, E
Primary Accession	O75832
Other Accession	BC011960
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	4B5
Calculated MW	24428

Additional Information

Gene ID	5716
Other Names	26S proteasome non-ATPase regulatory subunit 10, 26S proteasome regulatory subunit p28, Gankyrin, p28(GANK), PSMD10
Target/Specificity	PSMD10 (AAH11960, 127 a.a. ~ 226 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 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	PSMD10 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

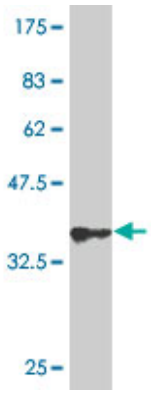
Background

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. This gene encodes a non-ATPase subunit of the 19S regulator. Two transcripts encoding different isoforms have been described. Pseudogenes have been identified on chromosomes 3 and 20.

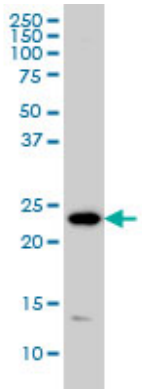
References

Gankyrin plays an essential role in Ras-induced tumorigenesis through regulation of the RhoA/ROCK pathway in mammalian cells. Man JH, et al. J Clin Invest, 2010 Aug 2. PMID 20628200.Systematic resequencing of X-chromosome synaptic genes in autism spectrum disorder and schizophrenia. Piton A, et al. Mol Psychiatry, 2010 May 18. PMID 20479760.Overexpression of a novel gene gankyrin correlates with the malignant phenotype of colorectal cancer. Tang S, et al. Cancer Biol Ther, 2010 Jan. PMID 19901563.p28GANK inhibits endoplasmic reticulum stress-induced cell death via enhancement of the endoplasmic reticulum adaptive capacity. Dai RY, et al. Cell Res, 2009 Nov. PMID 19736567.Involvement of the mitochondrial pathway in p53-independent apoptosis induced by p28GANK knockdown in Hep3B cells. Wang J, et al. Cytogenet Genome Res, 2009. PMID 19729910.

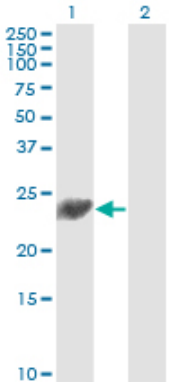
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .



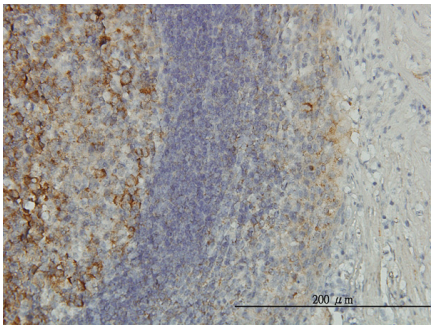
PSMD10 monoclonal antibody (M01), clone 4B5 Western Blot analysis of PSMD10 expression in HeLa ((Cat # AT3468a)

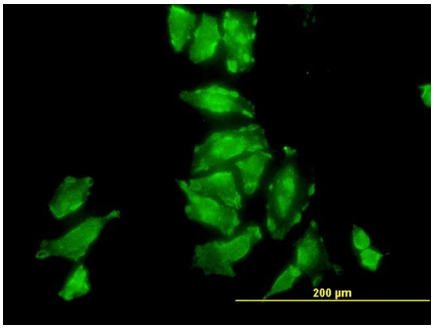


Western Blot analysis of PSMD10 expression in transfected 293T cell line by PSMD10 monoclonal antibody (M01), clone 4B5.

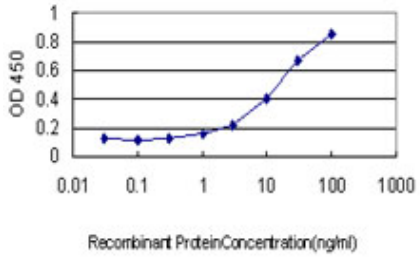
Lane 1: PSMD10 transfected lysate(24.4 KDa).
Lane 2: Non-transfected lysate.

Immunoperoxidase of monoclonal antibody to PSMD10 on formalin-fixed paraffin-embedded human tonsil. [antibody concentration 3 ug/ml]





Immunofluorescence of monoclonal antibody to PSMD10 on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged PSMD10 is approximately 0.3ng/ml as a capture antibody.