

#### PSMD10 Antibody (monoclonal) (M01)

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

## **Specification**

## PSMD10 Antibody (monoclonal) (M01) - Product Information

**Application** IF, WB, IHC, E **Primary Accession** 075832 BC011960 Other Accession Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG1 Kappa Calculated MW 24428

## PSMD10 Antibody (monoclonal) (M01) - 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.  $\sim$  226 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

## **Dilution**

WB~~1:500~1000

#### **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.

#### PSMD10 Antibody (monoclonal) (M01) - Protocols

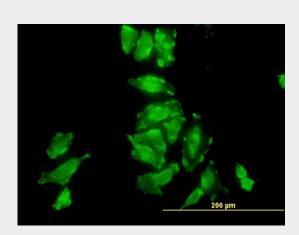
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

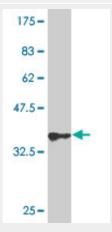


- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

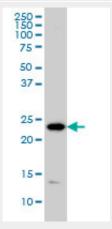
# PSMD10 Antibody (monoclonal) (M01) - Images



Immunofluorescence of monoclonal antibody to PSMD10 on HeLa cell. [antibody concentration 10  $\mu$ ml]



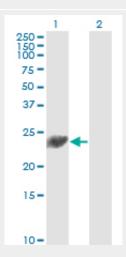
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa).



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



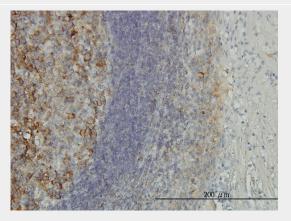
# HeLa ( (Cat # AT3468a )



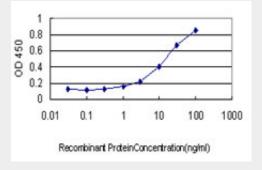
Western Blot analysis of PSMD10 expression in transfected 293T cell line by PSMD10 monoclonal antibody (M01), clone 4B5.

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]



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

## PSMD10 Antibody (monoclonal) (M01) - 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.

## PSMD10 Antibody (monoclonal) (M01) - 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.