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PSMC3 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant PSMC3.
Catalog # AT3465a

Product Information

Application	WB, E
Primary Accession	P17980
Other Accession	BC008713
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	1B9
Calculated MW	49204

Additional Information

Gene ID	5702
Other Names	26S protease regulatory subunit 6A, 26S proteasome AAA-ATPase subunit RPT5, Proteasome 26S subunit ATPase 3, Proteasome subunit P50, Tat-binding protein 1, TBP-1, PSMC3, TBP1
Target/Specificity	PSMC3 (AAH08713, 53 a.a. ~ 152 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 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	PSMC3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

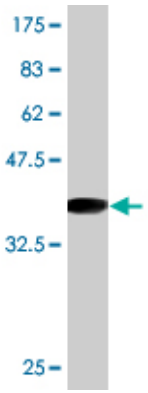
The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The 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 one of the ATPase subunits, a member of the triple-A family of ATPases that have chaperone-like activity. This subunit may compete with PSMC2 for binding to the HIV tat protein to

regulate the interaction between the viral protein and the transcription complex. A pseudogene has been identified on chromosome 9.

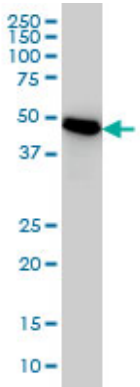
References

The 19S ATPase S6a (S6'/TBP1) regulates the transcription initiation of class II transactivator. Truax AD, et al. J Mol Biol, 2010 Jan 15. PMID 19853614.Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.Assembly pathway of the Mammalian proteasome base subcomplex is mediated by multiple specific chaperones. Kaneko T, et al. Cell, 2009 May 29. PMID 19490896.Tat-binding protein-1 (TBP-1), an ATPase of 19S regulatory particles of the 26S proteasome, enhances androgen receptor function in cooperation with TBP-1-interacting protein/Hop2. Satoh T, et al. Endocrinology, 2009 Jul. PMID 19325002.Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.

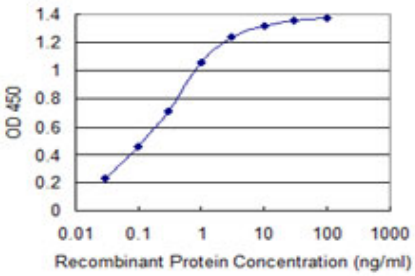
Images



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



PSMC3 monoclonal antibody (M01), clone 1B9 Western Blot analysis of PSMC3 expression in HeLa ((Cat # AT3465a)



Detection limit for recombinant GST tagged PSMC3 is 0.03 ng/ml as a capture antibody.