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PSME2 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant PSME2.
Catalog # AT3475a

Product Information

Application	WB, IHC, IP, E
Primary Accession	Q9UL46
Other Accession	NM_002818
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1G4
Calculated MW	27402

Additional Information

Gene ID	5721
Other Names	Proteasome activator complex subunit 2, 11S regulator complex subunit beta, REG-beta, Activator of multicatalytic protease subunit 2, Proteasome activator 28 subunit beta, PA28b, PA28beta, PSME2
Target/Specificity	PSME2 (NP_002809, 1 a.a. ~ 90 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 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	PSME2 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

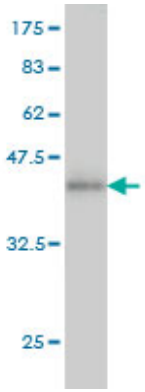
The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The 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. The immunoproteasome contains an alternate regulator, referred to as the 11S regulator or PA28, that replaces the 19S regulator. Three subunits (alpha, beta and gamma) of the 11S regulator have been

identified. This gene encodes the beta subunit of the 11S regulator, one of the two 11S subunits that is induced by gamma-interferon. Three beta and three alpha subunits combine to form a heterohexameric ring. Six pseudogenes have been identified on chromosomes 4, 5, 8, 10 and 13.

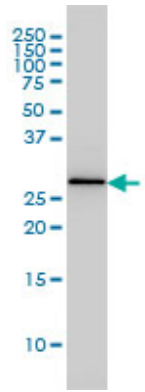
References

Towards a proteome-scale map of the human protein-protein interaction network. Rual JF, et al. Nature, 2005 Oct 20. PMID 16189514.The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.Mammalian Cdh1/Fzr mediates its own degradation. Listovsky T, et al. EMBO J, 2004 Apr 7. PMID 15029244.The Vif protein of HIV triggers degradation of the human antiretroviral DNA deaminase APOBEC3G. Conticello SG, et al. Curr Biol, 2003 Nov 11. PMID 14614829.Induction of APOBEC3G ubiquitination and degradation by an HIV-1 Vif-Cul5-SCF complex. Yu X, et al. Science, 2003 Nov 7. PMID 14564014.

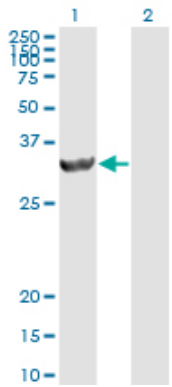
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (35.64 KDa) .



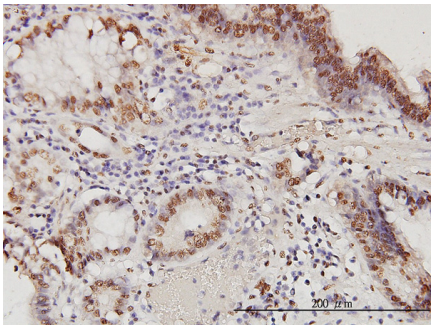
PSME2 monoclonal antibody (M02), clone 1G4 Western Blot analysis of PSME2 expression in MCF-7 ((Cat # AT3475a)

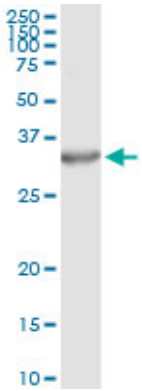


Western Blot analysis of PSME2 expression in transfected 293T cell line by PSME2 monoclonal antibody (M02), clone 1G4.

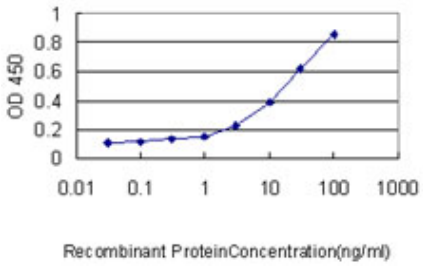
Lane 1: PSME2 transfected lysate(27.4 KDa).
Lane 2: Non-transfected lysate.

Immunoperoxidase of monoclonal antibody to PSME2 on formalin-fixed paraffin-embedded human stomach carcinoma. [antibody concentration 6 ug/ml]





Immunoprecipitation of PSME2 transfected lysate using anti-PSME2 monoclonal antibody and Protein A Magnetic Bead (U0007), and immunoblotted with PSME2 MaxPab rabbit polyclonal antibody.



Detection limit for recombinant GST tagged PSME2 is approximately 0.3ng/ml as a capture antibody.