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Mouse Monoclonal Antibody to PSMC3

Purified Mouse Monoclonal Antibody
Catalog # AO2375a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P17980
Reactivity	Human, Rat, Monkey
Host	Mouse
Clonality	Monoclonal
Clone Names	1G10C9
Isotype	Mouse IgG1
Calculated MW	49204
Description	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.;
Immunogen	Purified recombinant fragment of human *** (AA: 53-152) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide
Application Note	ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000; ICC: 1/200 - 1/1000; FCM: 1/200 - 1/400

Additional Information

Gene ID	5702
Other Names	TBP1
Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions	Mouse Monoclonal Antibody to PSMC3 is for research use only and not for use in diagnostic or therapeutic procedures.

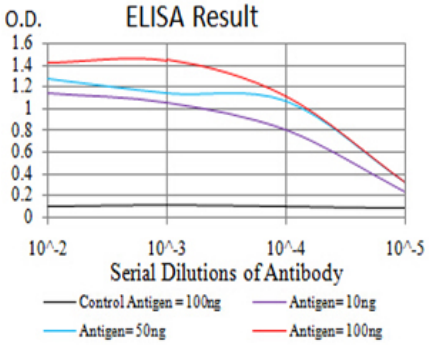
Protein Information

Name	PSMC3
Synonyms	TBP1
Function	Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair. PSMC3 belongs to the heterohexameric ring of AAA (ATPases associated with diverse cellular activities) proteins that unfolds ubiquitinated target proteins that are concurrently translocated into a proteolytic chamber and degraded into peptides.
Cellular Location	Cytoplasm. Nucleus. Note=Colocalizes with TRIM5 in the cytoplasmic bodies {ECO:0000250|UniProtKB:O88685}

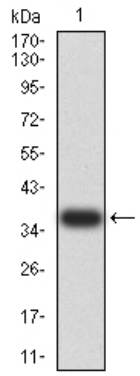
References

1.Oncogene. 2012 Apr 5;31(14):1817-24. ; 2.PLoS One. 2011;6(10):e22800.;

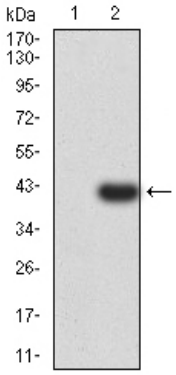
Images



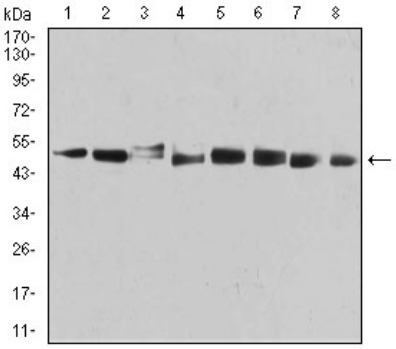
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



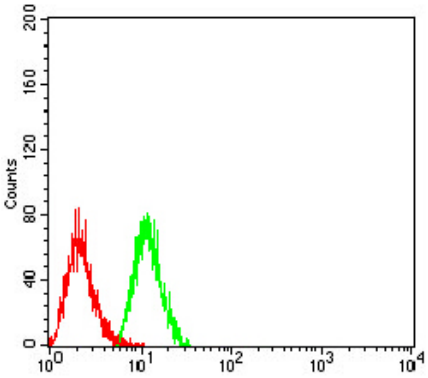
Western blot analysis using PSMC3 mAb against human PSMC3 (AA: 53-152) recombinant protein. (Expected MW is 37.2 kDa)



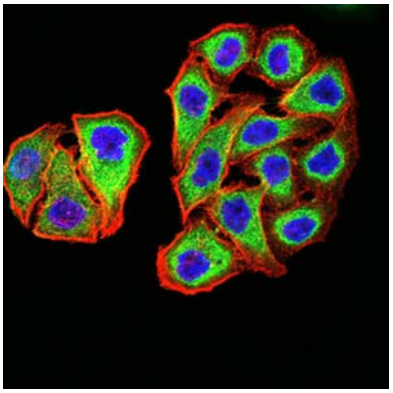
Western blot analysis using PSMC3 mAb against HEK293 (1) and PSMC3 (AA: 53-152)-hIgGFc transfected HEK293 (2) cell lysate.



Western blot analysis using PSMC3 mouse mAb against MCF-7 (1), PC-3 (2), T47D (3), SW620 (4), COS7 (5), C6 (6), HELA (7), and A431 (8) cell lysate.

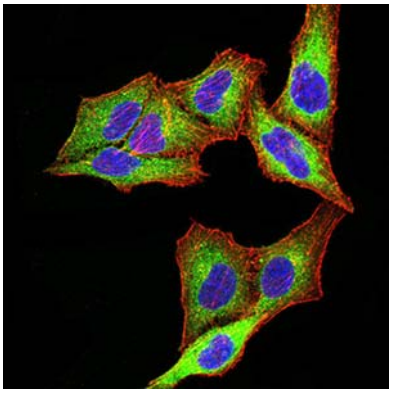


Flow cytometric analysis of Hela cells using PSMC3 mouse mAb (green) and negative control (red).



Immunofluorescence analysis of MCF-7 cells using PSMC3 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Secondary antibody from Fisher

Immunofluorescence analysis of SK-OV-3 cells using PSMC3 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher



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