

Product datasheet for **TA500931S**

PSMC3 Mouse Monoclonal Antibody [Clone ID: OTI7B10]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI7B10
Applications:	FC, IF, WB
Recommended Dilution:	WB 1:2000, IF 1:100, Flow 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PSMC3(NP_002795) produced in HEK293T cell.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	0.57 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	49.2 kDa
Gene Name:	proteasome 26S subunit, ATPase 3
Database Link:	NP_002795 Entrez Gene 19182 Mouse Entrez Gene 29677 Rat Entrez Gene 5702 Human P17980



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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.

Synonyms:

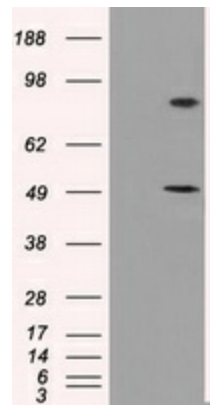
DCIDP; RPT5; TBP1

Protein Families:

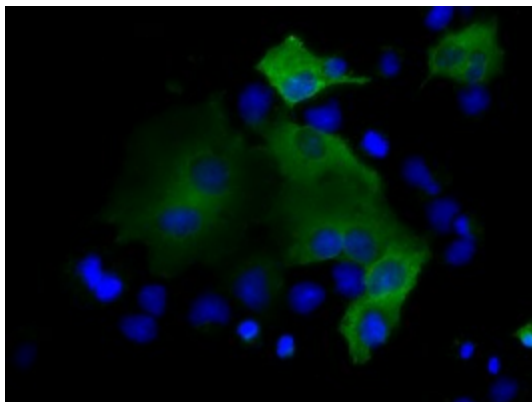
Druggable Genome, Transcription Factors

Protein Pathways:

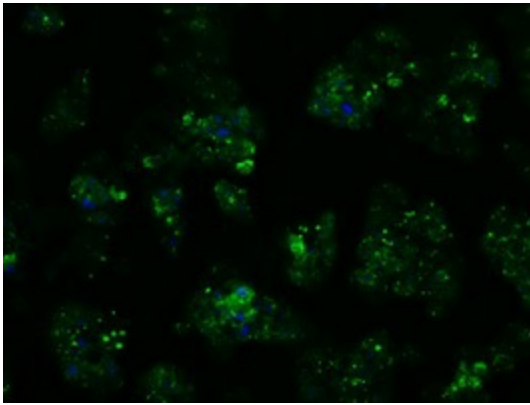
Proteasome

Product images:

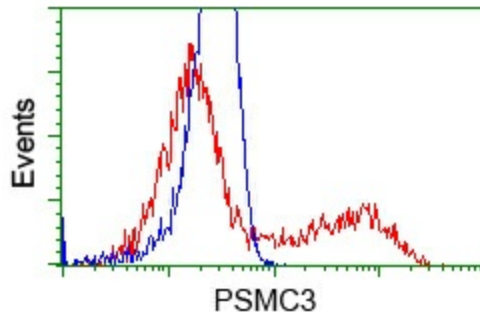
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PSMC3 ([RC201790], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PSMC3. Positive lysates [LY400992] (100ug) and [LC400992] (20ug) can be purchased separately from OriGene.



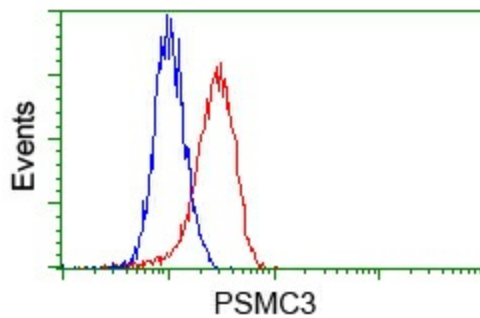
Anti-PSMC3 mouse monoclonal antibody ([TA500931]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PSMC3 ([RC201790]).



Immunofluorescent staining of HepG2 cells using anti-PSMC3 mouse monoclonal antibody ([TA500931]).



HEK293T cells transfected with either pCMV6-ENTRY PSMC3 ([RC201790]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-PSMC3 mouse monoclonal ([TA500931]), and then analyzed by flow cytometry.



Flow cytometric analysis of HeLa cells, using anti-PSMC3 antibody ([TA500931]), (Red) compared to a nonspecific negative control antibody (TA50011) (Blue).