

Product datasheet for TA500926M

OriGene Technologies, Inc.

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PSMC3 Mouse Monoclonal Antibody [Clone ID: OTI8D6]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI8D6

Applications: FC, IF, IHC, WB

Recommended Dilution: WB 1:2000, IHC 1:50, 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: 0.81 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 MouseEntrez Gene 29677 RatEntrez Gene 5702 Human

P17980





Background:

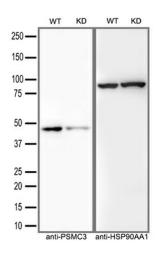
The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The 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

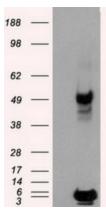
Protein Pathways: Proteasome

Product images:

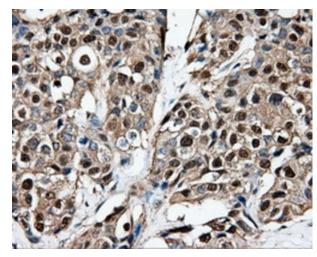


Equivalent amounts of cell lysates (30 ug per lane) of wild-type HeLa cells(WT) and PSMC3-Knockdown HeLa cells(KD) were separated by SDS-PAGE and immunoblotted with anti-PSMC3 monoclonal antibody [TA500926](1:2500).Then the blotted membrane was stripped and reprobed with anti-HSP90AA1 antibody as a loading control.

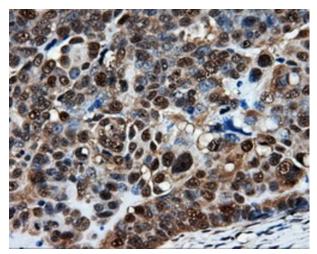




HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PSMC3 ([RC201790], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PSMC3. Positive lysates [LY400992] (100ug) and [LC400992]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

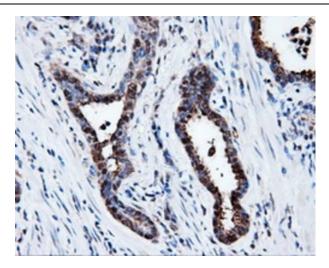


Immunohistochemical staining of paraffinembedded Adenocarcinoma of breast tissue using anti-PSMC3 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

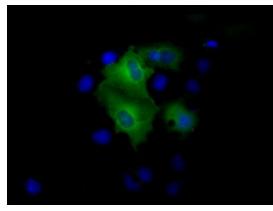


Immunohistochemical staining of paraffinembedded Adenocarcinoma of ovary tissue using anti-PSMC3mouse monoclonal antibody. Heatinduced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

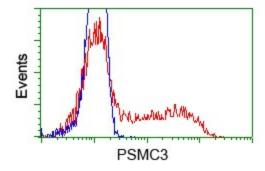




Immunohistochemical staining of paraffinembedded Carcinoma of prostate tissue using anti-PSMC3mouse monoclonal antibody. Heatinduced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

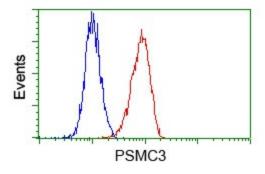


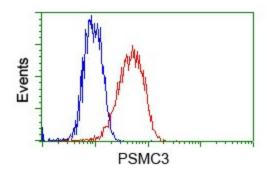
Anti-PSMC3 mouse monoclonal antibody ([TA500926]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PSMC3 ([RC201790]).



HEK293T cells transfected with either pCMV6-ENTRY PSMC3 ([RC201790]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-PSMC3 mouse monoclonal ([TA500926]), and then analyzed by flow cytometry.







Flow cytometric analysis of Hela cells, using anti-PSMC3 antibody ([TA500926]), (Red) compared to a nonspecific negative control antibody (TA50011) (Blue).

Flow cytometric analysis of Jurkat cells, using anti-PSMC3 antibody ([TA500926]), (Red) compared to a nonspecific negative control antibody (TA50011) (Blue).