

Product datasheet for CF500922

OriGene Technologies, Inc.

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PSMC3 Mouse Monoclonal Antibody [Clone ID: OTI9F3]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI9F3

Applications: FC, IF, IHC, WB

Recommended Dilution: WB 1:2000, IHC 1:50, IF 1:100, Flow 1:100

Reactivity: Human, Dog, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human PSMC3(NP_002795) produced in HEK293T

cell.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

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 475980 DogEntrez Gene 5702

<u>Human</u> <u>P17980</u>





Background:

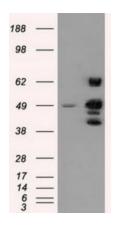
The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The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

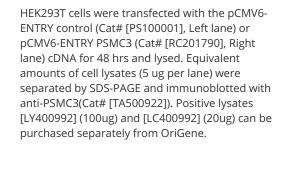
Synonyms: DCIDP; RPT5; TBP1

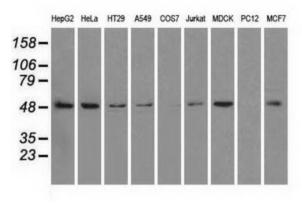
Protein Families: Druggable Genome, Transcription Factors

Protein Pathways: Proteasome

Product images:

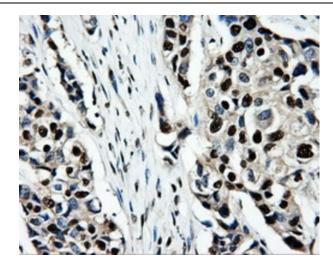




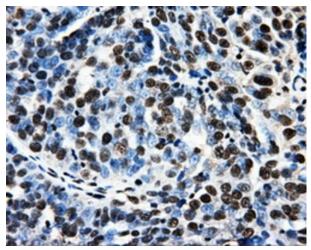


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-PSMC3 monoclonal antibody.

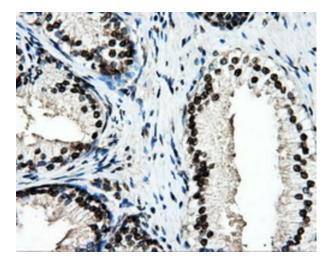




Immunohistochemical staining of paraffinembedded Adenocarcinoma of breast tissue using anti-PSMC3 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

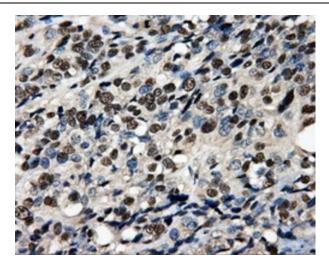


Immunohistochemical staining of paraffinembedded Adenocarcinoma of ovary tissue using anti-PSMC3mouse monoclonal antibody. Heatinduced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

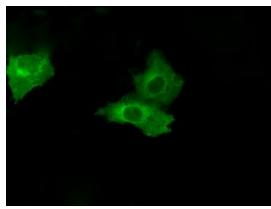


Immunohistochemical staining of paraffinembedded prostate tissue within the normal limits using anti-PSMC3mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

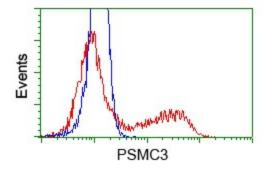




Immunohistochemical staining of paraffinembedded Carcinoma of bladder tissue using anti-PSMC3mouse monoclonal antibody. Heatinduced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

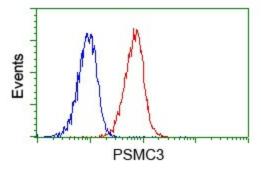


Anti-PSMC3 mouse monoclonal antibody ([TA500922]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PSMC3 ([RC201790]).



HEK293T cells transfected with either pCMV6-ENTRY PSMC3 ([RC201790]) (Red) or empty vector control plasmid (Blue) were immunostained with anti-PSMC3 mouse monoclonal ([TA500922]), and then analyzed by flow cytometry.





Flow cytometric analysis of Jurkat cells, using anti-PSMC3 antibody ([TA500922]), (Red) compared to a nonspecific negative control antibody (TA50011) (Blue).