

# **Product datasheet for CF500929**

### OriGene Technologies, Inc.

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## PSMC3 Mouse Monoclonal Antibody [Clone ID: OTI9G5]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI9G5
Applications: IF, WB

**Recommended Dilution:** WB 1:2000, IF 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:** 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 5702 Human

P17980





#### Background:

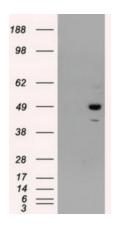
The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The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

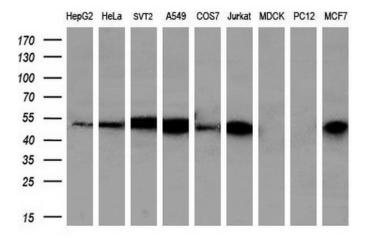
**Protein Pathways:** Proteasome

## **Product images:**

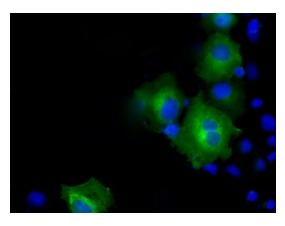


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PSMC3 ([RC201790], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PSMC3. Positive lysates [LY400992] (100ug) and [LC400992]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





Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-PSMC3 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:200).



Anti-PSMC3 mouse monoclonal antibody ([TA500929]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PSMC3 ([RC201790]).