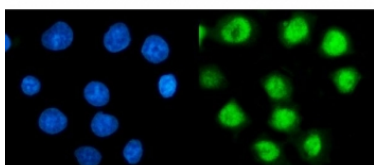


## PSMC3 Antibody / TBP-1 [clone 4D3] (RQ6587)

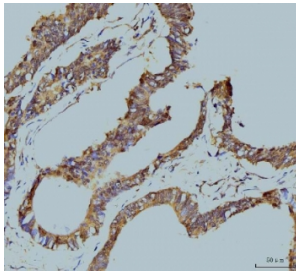
Catalog No.	Formulation	Size
RQ6587	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

**Bulk quote request**

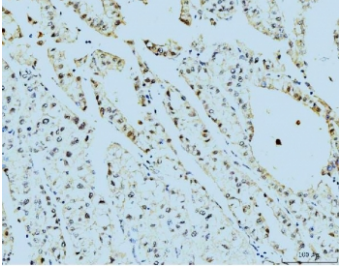
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Format</b>	Antigen affinity purified
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG2b
<b>Clone Name</b>	4D3
<b>Purity</b>	Antigen affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	P17980
<b>Localization</b>	Cytoplasmic, nuclear
<b>Applications</b>	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence (FFPE) : 5ug/ml Flow Cytometry : 1-3ug/million cells
<b>Limitations</b>	This PSMC3 antibody is available for research use only.



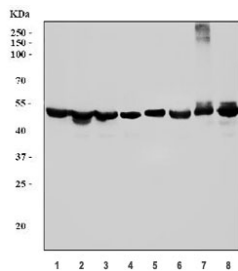
Immunofluorescent staining of FFPE human MCF7 cells with PSMC3 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



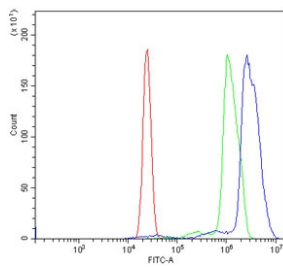
IHC staining of FFPE human colonic adenocarcinoma tissue with PSMC3 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human liver cancer tissue with PSMC3 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human HEK293, 2) human HeLa, 3) human HepG2, 4) human PC-3, 5) rat stomach, 6) rat kidney, 7) mouse stomach and 8) mouse kidney tissue lysate with PSMC3 antibody. Predicted molecular weight ~50 kDa.



Flow cytometry testing of human U937 cells with PSMC3 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= PSMC3 antibody.

## Description

26S protease regulatory subunit 6A, also known as 26S proteasome AAA-ATPase subunit Rpt5, is an enzyme that in humans is encoded by the PSMC3 gene. 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.

## Application Notes

Optimal dilution of the PSMC3 antibody should be determined by the researcher.

## Immunogen

Recombinant human protein (amino acids M1-A439) was used as the immunogen for the PSMC3 antibody.

## **Storage**

After reconstitution, the PSMC3 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.