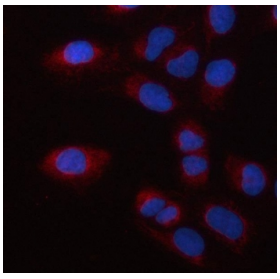
MSS1 Antibody / PSMC2 (RQ8129)

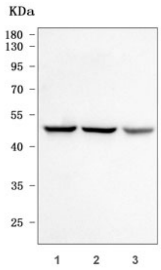
Catalog No.	Formulation	Size
RQ8129	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Monkey
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P35998
Localization	Cytoplasm
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This MSS1 antibody is available for research use only.



Immunofluorescent staining of FFPE human U-2 OS cells with MSS1 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) human MOLT4, 2) human T-47D and 3) COS-7 cell lysate with MSS1 antibody. Predicted molecular weight ~49 kDa.

Description

26S protease regulatory subunit 7, also known as 26S proteasome AAA-ATPase subunit Rpt1 and mammalian suppressor of sgv-1 of yeast (MSS1), is an enzyme that in humans is encoded by the PSMC2 gene. The 26S proteasome is a multi-catalytic 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 which have a chaperone-like activity. This subunit has been shown to interact with several of the basal transcription factors so, in addition to participation in proteasome functions, this subunit may participate in the regulation of transcription. This subunit may also compete with PSMC3 for binding to the HIV tat protein to regulate the interaction between the viral protein and the transcription complex. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

Application Notes

Optimal dilution of the MSS1 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids K34-N433) was used as the immunogen for the MSS1 antibody.

Storage

After reconstitution, the MSS1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.