

# Product datasheet

info@arigobio.com

ARG43993 anti-PSMC2 antibody

Package: 50 μg Store at: -20°C

## Summary

Product Description Rabbit Polyclonal antibody recognizes PSMC2

Tested Reactivity Hu, Mk

Tested Application ELISA, ICC/IF, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name PSMC2
Species Human

Immunogen Human PSMC2 recombinant protein

Conjugation Un-conjugated

Alternate Names PSMC2; Proteasome 26S Subunit, ATPase 2; MSS1; Nbla10058; RPT1; S7; Proteasome (Prosome,

Macropain) 26S Subunit, ATPase, 2; Mammalian Suppressor Of Sgv-1 Of Yeast; 26S Proteasome AAA-ATPase Subunit RPT1; Putative Protein Product Of Nbla10058; 26S Proteasome Regulatory Subunit 7; Protease 26S Subunit 7; Testis Secretory Sperm-Binding Protein Li 197a; Proteasome 26S Subunit,

ATPase, 2; 26S Protease Regulatory Subunit 7; Proteasome 26S Subunit ATPase 2

# **Application Instructions**

Application table	Application	Dilution
	ELISA	0.1-0.5 μg/ml
	ICC/IF	5 μg/ml
	WB	0.25-0.5 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form Liquid

Purification Affinity purified with Immunogen.

Buffer 0.9% NaCl, 0.2% Na2HPO4 and 4% Trehalose.

Stabilizer 4% Trehalose

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Gene Symbol

PSMC2

Gene Full Name

Proteasome 26S Subunit, ATPase 2

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 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.

Function

Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair. PSMC2 belongs to the heterohexameric ring of AAA (ATPases associated with diverse cellular activities) proteins that unfolds ubiquitinated target proteins that are concurrently translocated into a proteolytic chamber and degraded into peptides.

Calculated Mw

49 kDa

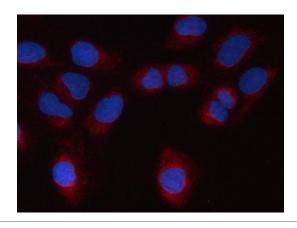
PTM

Acetylation, Phosphoprotein, Ubl conjugation

Cellular Localization

Cytoplasm, Proteasome

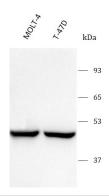
### **Images**



#### ARG43993 anti-PSMC2 antibody ICC/IF image

Immunofluorescence: U2OS cells stained with ARG43993 anti-PSMC2 antibody at 5  $\mu g/ml$  dilution.

# ARG43993 anti-PSMC2 antibody WB image



Western blot: MOLT-4 and T-47D stained with ARG43993 anti-PSMC2 antibody at 0.5  $\mu g/mL$  dilution.