

### PSMD10 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14586b

# **Specification**

### PSMD10 Antibody (C-term) - Product Information

Application WB,E
Primary Accession 075832

Other Accession <u>Q9Z2X3, Q9Z2X2, NP 002805.1, NP 736606.1</u>

Reactivity
Predicted
Mouse, Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Mouse, Rat
Rabbit
Rabbit
Polyclonal
Rabbit IgG
24428
Antigen Region
184-213

# PSMD10 Antibody (C-term) - Additional Information

#### **Gene ID 5716**

#### **Other Names**

26S proteasome non-ATPase regulatory subunit 10, 26S proteasome regulatory subunit p28, Gankyrin, p28(GANK), PSMD10

### Target/Specificity

This PSMD10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 184-213 amino acids from the C-terminal region of human PSMD10.

#### **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

PSMD10 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### PSMD10 Antibody (C-term) - Protein Information

### Name PSMD10





Tel: 858.875.1900 Fax: 858.875.1999

Function Acts as a chaperone during the assembly of the 26S proteasome, specifically of the PA700/19S regulatory complex (RC). In the initial step of the base subcomplex assembly is part of an intermediate PSMD10:PSMC4:PSMC5:PAAF1 module which probably assembles with a PSMD5:PSMC2:PSMC1:PSMD2 module. Independently of the proteasome, regulates EGF-induced AKT activation through inhibition of the RHOA/ROCK/PTEN pathway, leading to prolonged AKT activation. Plays an important role in RAS-induced tumorigenesis.

# **Cellular Location** Cytoplasm. Nucleus

#### **Tissue Location**

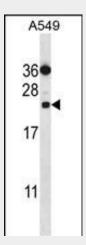
Tends to be up-regulated in cancer cells with RAS mutations, including lung cancers and adenocarconimas (at protein level).

# PSMD10 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

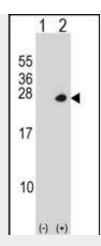
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

#### PSMD10 Antibody (C-term) - Images



PSMD10 Antibody (C-term) (Cat. #AP14586b) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the PSMD10 antibody detected the PSMD10 protein (arrow).





Western blot analysis of PSMD10 (arrow) using rabbit polyclonal PSMD10 Antibody (C-term) (Cat. #AP14586b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PSMD10 gene.

# PSMD10 Antibody (C-term) - 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 a non-ATPase subunit of the 19S regulator. Two transcripts encoding different isoforms have been described. Pseudogenes have been identified on chromosomes 3 and 20.

# PSMD10 Antibody (C-term) - References

Meng, Y., et al. Cancer Lett. 297(1):9-17(2010) Man, J.H., et al. J. Clin. Invest. 120(8):2829-2841(2010) Piton, A., et al. Mol. Psychiatry (2010) In press: Serquera, D., et al. Biophys. J. 98(7):1294-1301(2010) Tang, S., et al. Cancer Biol. Ther. 9(2):88-95(2010)