

PSMD10 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AW5126

Product Information

Application	IF, IHC-P, WB
Primary Accession	O75832
Other Accession	Q9Z2X2
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24428
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	5716
Antigen Region	43-76
Other Names	26S proteasome non-ATPase regulatory subunit 10, 26S proteasome regulatory subunit p28, Gankyrin, p28(GANK), PSMD10
Dilution	IF~~1:25 IHC-P~~1:100~500 WB~~ 1:1000
Target/Specificity	This PSMD10 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 43-76 amino acids from the Central region of human PSMD10.
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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PSMD10
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 adenocarcinomas (at protein level).

Background

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.

References

Hori T.,et al.Gene 216:113-122(1998).

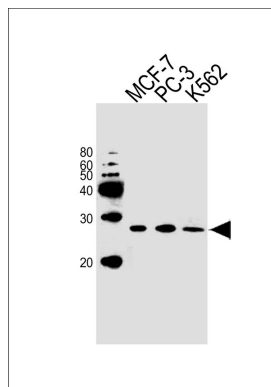
Higashitsuji H.,et al.Submitted (JAN-1996) to the EMBL/GenBank/DDBJ databases.

Wang H.,et al.Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.

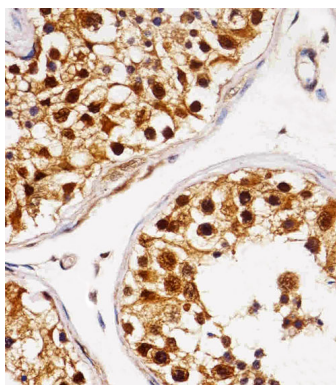
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Kalnina N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.

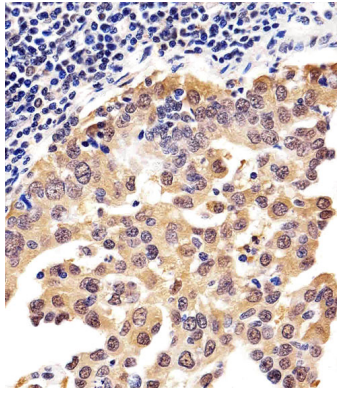
Images



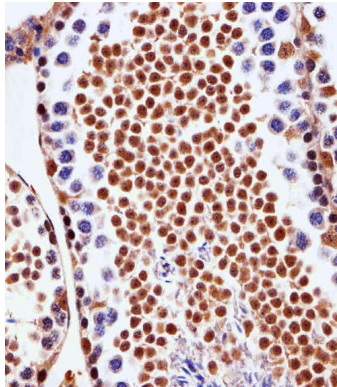
Western blot analysis of lysates from MCF-7, PC-3, K562 cell line (from left to right), using PSMD10 Antibody (Center)(Cat. #AW5126). AW5126 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



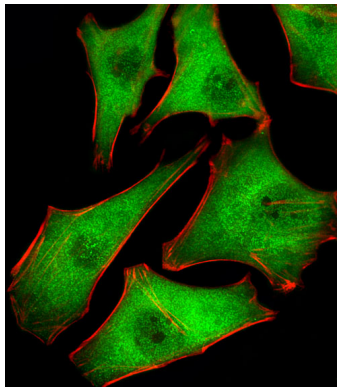
Immunohistochemical analysis of paraffin-embedded H.testis section using PSMD10 Antibody (Center)(Cat#AP20569). AW5126 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded H. lung adenocarcinoma section using PSMD10 Antibody (Center)(Cat#AW5126). AW5126 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Immunohistochemical analysis of paraffin-embedded M. testis section using PSMD10 Antibody (Center)(Cat#AW5126). AW5126 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Fluorescent image of Hela cells stained with PSMD10 Antibody (Center)(Cat#AW5126). AW5126 was diluted at 1:25 dilution. An Alexa Fluor 488-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody (green). Cytoplasmic actin was counterstained with Alexa Fluor® 555 conjugated with Phalloidin (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.