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PSMD12 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20088c

Product Information

Application	WB, E
Primary Accession	O00232
Other Accession	Q2KJ25, NP_002807.1
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42427
Calculated MW	52904
Antigen Region	276-304

Additional Information

Gene ID	5718
Other Names	26S proteasome non-ATPase regulatory subunit 12, 26S proteasome regulatory subunit RPN5, 26S proteasome regulatory subunit p55, PSMD12
Target/Specificity	This PSMD12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 276-304 amino acids from the Central region of human PSMD12.
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	PSMD12 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PSMD12
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.

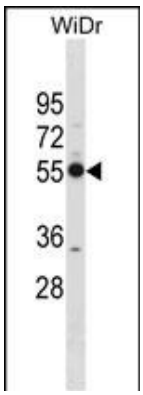
Background

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. A pseudogene has been identified on chromosome 3.

References

Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :
Gandhi, T.K., et al. Nat. Genet. 38(3):285-293(2006)
Listovsky, T., et al. EMBO J. 23(7):1619-1626(2004)
Bouwmeester, T., et al. Nat. Cell Biol. 6(2):97-105(2004)
Conticello, S.G., et al. Curr. Biol. 13(22):2009-2013(2003)

Images



PSMD12 Antibody (Center) (Cat. #AP20088c) western blot analysis in WiDr cell line lysates (35ug/lane).This demonstrates the PSMD12 antibody detected the PSMD12 protein (arrow).