



Rabbit Anti-Human PSMC2 Polyclonal Antibody (CABT-L2196)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Polyclonal Antibody to Proteasome 26S Subunit, ATPase 2 (Knockout Validated)
Specificity	The antibody is a rabbit polyclonal antibody raised against PSMC2. It has been selected for its ability to recognize PSMC2 in immunohistochemical staining and western blotting.
Target	PSMC2
Immunogen	Recombinant fragment corresponding to human PSMC2 (Met1~Asn433)
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse
Purification	Antigen-specific affinity chromatography followed by Protein A affinity chromatography
Conjugate	Unconjugated
Applications	WB
Format	Liquid
Concentration	Lot specific
Size	200 µg
Buffer	Supplied as solution form in 0.01M PBS with 50% glycerol, pH7.4.
Preservative	0.05% Proclin-300

Storage	Avoid repeated freeze/thaw cycles. Store at 4°C for frequent use. Aliquot and store at -20°C for 12 months.
Ship	4°C with ice bags

BACKGROUND

Introduction	<p>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. [provided by RefSeq, Mar 2011]</p>
Keywords	S7;MSS1;Mammalian Suppressor Of Sgv-1 Of Yeast;Protease 26S Subunit 7;Putative Protein Product Of Nbla10058;26S proteasome AAA-ATPase subunit RPT1

GENE INFORMATION

Gene Name	PSMC2 proteasome (prosome, macropain) 26S subunit, ATPase, 2 [Homo sapiens (human)]
Official Symbol	PSMC2
Synonyms	PSMC2; proteasome (prosome, macropain) 26S subunit, ATPase, 2; S7; MSS1; Nbla10058; 26S protease regulatory subunit 7; protease 26S subunit 7; proteasome 26S subunit ATPase 2; proteasome 26S subunit, ATPase, 2; putative protein product of Nbla10058; 26S proteasome AAA-ATPase subunit RPT1; mammalian suppressor of sgV-1 of yeast;
Entrez Gene ID	5701
Protein Refseq	NP_001191382
UniProt ID	B7Z571
Chromosome Location	7q22.1-q22.3

Pathway	AMER1 mutants destabilize the destruction complex; APC truncation mutants are not K63 polyubiquitinated; APC truncation mutants have impaired AXIN binding; APC/C-mediated degradation of cell cycle proteins; APC/C:Cdc20 mediated degradation of Securin; APC/C:Cdc20 mediated degradation of mitotic proteins; APC/C:Cdh1 mediated degradation of Cdc20 and other APC/C:Cdh1 targeted proteins in late mitosis/early G1; APC:Cdc20 mediated degradation of cell cycle proteins prior to satisfaction of the cell c
Function	ATP binding; ATPase activity; protein binding;