

**PSMC2 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP14584a****Specification**

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**PSMC2 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [P35998](#)**PSMC2 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 5701**Other Names**

26S protease regulatory subunit 7, 26S proteasome AAA-ATPase subunit RPT1, Proteasome 26S subunit ATPase 2, Protein MSS1, PSMC2, MSS1

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**PSMC2 Antibody (N-term) Blocking Peptide - Protein Information****Name** PSMC2**Synonyms** MSS1 {ECO:0000303|PubMed:8500623}**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.

**Cellular Location**

Cytoplasm. Note=Colocalizes with TRIM5 in cytoplasmic bodies

**PSMC2 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

#### **PSMC2 Antibody (N-term) Blocking Peptide - Images**

#### **PSMC2 Antibody (N-term) Blocking Peptide - 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.

#### **PSMC2 Antibody (N-term) Blocking Peptide - References**

Kaneko, T., et al. Cell 137(5):914-925(2009) Tu, L.C., et al. Mol. Cell Proteomics 6(4):575-588(2007) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :Guo, D., et al. Biochem. Biophys. Res. Commun. 337(4):1308-1318(2005) Bruneel, A., et al. Proteomics 5(15):3876-3884(2005)