

PSMD4 Blocking Peptide (C-term) Synthetic peptide Catalog # BP19888b

# Specification

# **PSMD4 Blocking Peptide (C-term) - Product Information**

Primary Accession Other Accession <u>P55036</u> <u>A2A3N6, NP 002801.1</u>

## **PSMD4 Blocking Peptide (C-term) - Additional Information**

Gene ID 5710

**Other Names** 

26S proteasome non-ATPase regulatory subunit 4, 26S proteasome regulatory subunit RPN10, 26S proteasome regulatory subunit S5A, Antisecretory factor 1, AF, ASF, Multiubiquitin chain-binding protein, PSMD4, MCB1

# Target/Specificity

The synthetic peptide sequence is selected from aa 315-328 of HUMAN PSMD4

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.

## **PSMD4 Blocking Peptide (C-term) - Protein Information**

Name PSMD4

Synonyms MCB1

#### 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. PSMD4 acts as an ubiquitin receptor subunit through ubiquitin- interacting motifs and selects ubiquitin-conjugates for destruction. Displays a preferred selectivity for longer polyubiquitin chains.



# **PSMD4 Blocking Peptide (C-term) - Protocols**

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

#### <u>Blocking Peptides</u>

# PSMD4 Blocking Peptide (C-term) - Images

# PSMD4 Blocking Peptide (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 one of the non-ATPase subunits of the 19S regulator lid. Pseudogenes have been identified on chromosomes 10 and 21.

# **PSMD4 Blocking Peptide (C-term) - References**

Elangovan, M., et al. Biochem. Biophys. Res. Commun. 396(2):425-428(2010) Safadi, S.S., et al. J. Biol. Chem. 285(2):1424-1434(2010) Zhang, N., et al. Mol. Cell 35(3):280-290(2009) Kim, H.T., et al. EMBO J. 28(13):1867-1877(2009) Gaurnier-Hausser, A., et al. Curr. Pharm. Des. 15(17):1937-1948(2009)