

PSMD12 Blocking Peptide (Center)
Synthetic peptide
Catalog # BP20088c**Specification**

PSMD12 Blocking Peptide (Center) - Product Information

Primary Accession [O00232](#)
Other Accession [Q2KJ25](#), [NP_002807.1](#)

PSMD12 Blocking Peptide (Center) - 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

The synthetic peptide sequence is selected from aa 291-304 of HUMAN PSMD12

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.

PSMD12 Blocking Peptide (Center) - 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.

PSMD12 Blocking Peptide (Center) - Protocols

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

- [Blocking Peptides](#)

PSMD12 Blocking Peptide (Center) - Images

PSMD12 Blocking Peptide (Center) - 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.

PSMD12 Blocking Peptide (Center) - 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)
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