

**PSMB7 Blocking Peptide (Center)**  
**Synthetic peptide**  
**Catalog # BP21570c****Specification**

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**PSMB7 Blocking Peptide (Center) - Product Information**Primary Accession [Q99436](#)**PSMB7 Blocking Peptide (Center) - Additional Information****Gene ID** 5695**Other Names**

Proteasome subunit beta type-7, Macropain chain Z, Multicatalytic endopeptidase complex chain Z, Proteasome subunit Z, PSMB7, Z

**Target/Specificity**

The synthetic peptide sequence is selected from aa 180-191 of HUMAN PSMB7

**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.

**PSMB7 Blocking Peptide (Center) - Protein Information****Name** PSMB7 ([HGNC:9544](#))**Synonyms** Z**Function**

Component of the 20S core proteasome complex involved in the proteolytic degradation of most intracellular proteins. This complex plays numerous essential roles within the cell by associating with different regulatory particles. Associated with two 19S regulatory particles, forms the 26S proteasome and thus participates in the ATP- dependent degradation of ubiquitinated proteins. The 26S proteasome plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins that could impair cellular functions, and by removing proteins whose functions are no longer required. Associated with the PA200 or PA28, the 20S proteasome mediates ubiquitin- independent protein degradation. This type of proteolysis is required in several pathways including spermatogenesis (20S-PA200 complex) or generation of a subset of MHC class I-presented antigenic peptides (20S-PA28 complex). Within the 20S core complex, PSMB7 displays a trypsin-like activity.

**Cellular Location**

Cytoplasm. Nucleus. Note=Translocated from the cytoplasm into the nucleus following interaction with AKIRIN2, which bridges the proteasome with the nuclear import receptor IPO9

**Tissue Location**

Expressed at a low level in colonic mucosa. Up- regulated in colorectal cancer tissues.

**PSMB7 Blocking Peptide (Center) - Protocols**

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

- [Blocking Peptides](#)

**PSMB7 Blocking Peptide (Center) - Images****PSMB7 Blocking Peptide (Center) - Background**

The proteasome is a multicatalytic proteinase complex which is characterized by its ability to cleave peptides with Arg, Phe, Tyr, Leu, and Glu adjacent to the leaving group at neutral or slightly basic pH. The proteasome has an ATP-dependent proteolytic activity. This unit is responsible of the trypsin-like activity.

**PSMB7 Blocking Peptide (Center) - References**

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Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Humphray S.J.,et al.Nature 429:369-374(2004).  
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.  
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