

PSMB7 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP2914a

Specification

PSMB7 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>Q99436</u>

PSMB7 Antibody (N-term) Blocking Peptide - 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 used to generate the antibody AP2914a was selected from the N-term region of human PSMB7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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 Antibody (N-term) Blocking Peptide - Protein Information

Name PSMB7

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 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

PSMB7 Antibody (N-term) Blocking Peptide - Images

PSMB7 Antibody (N-term) Blocking Peptide - Background

PSMB7 encodes a member of the proteasome B-type family, also known as the T1B family, that is a 20S core beta subunit in the proteasome.

PSMB7 Antibody (N-term) Blocking Peptide - References

Huang,X., et.al., J. Biol. Chem. 283 (44), 29770-29783 (2008)