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PSMB3 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP2946b

Specification

PSMB3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P49720

PSMB3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 5691

Other Names
Proteasome subunit beta type-3, Proteasome chain 13, Proteasome component C10-II, Proteasome theta chain, PSMB3

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2946b was selected from the C-term region of human PSMB3. 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.

PSMB3 Antibody (C-term) Blocking Peptide - Protein Information

Name PSMB3

Function
Non-catalytic 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).

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

PSMB3 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

PSMB3 Antibody (C-term) Blocking Peptide - Images

PSMB3 Antibody (C-term) Blocking Peptide - Background

The proteasome is a multicatalytic proteinase complex with a highly ordered ring-shaped 20S core structure. The core structure 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. 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.

PSMB3 Antibody (C-term) Blocking Peptide - References

Seeger,M., et.al., J. Biol. Chem. 272 (13), 8145-8148 (1997)