

PSMB6 Blocking Peptide (Center) Synthetic peptide Catalog # BP21651c

Specification

PSMB6 Blocking Peptide (Center) - Product Information

Primary Accession

<u>P28072</u>

PSMB6 Blocking Peptide (Center) - Additional Information

Gene ID 5694

Other Names

Proteasome subunit beta type-6, Macropain delta chain, Multicatalytic endopeptidase complex delta chain, Proteasome delta chain, Proteasome subunit Y, PSMB6, LMPY, Y

Target/Specificity

The synthetic peptide sequence is selected from aa 171-185 of HUMAN PSMB6

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.

PSMB6 Blocking Peptide (Center) - Protein Information

Name PSMB6 (<u>HGNC:9543</u>)

Synonyms LMPY, Y

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, PSMB6 displays a peptidylglutamyl-hydrolizing activity also termed postacidic or caspase-like activity, meaning that the peptides bond hydrolysis occurs directly after acidic residues.



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

PSMB6 Blocking Peptide (Center) - Protocols

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

<u>Blocking Peptides</u>

PSMB6 Blocking Peptide (Center) - Images

PSMB6 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 peptidyl glutamyl-like activity. May catalyze basal processing of intracellular antigens.

PSMB6 Blocking Peptide (Center) - References

Akiyama K.-Y., et al.Science 265:1231-1234(1994). Bienvenut W.V., et al.Submitted (DEC-2008) to UniProtKB. DeMartino G.N., et al.Biochim. Biophys. Acta 1079:29-38(1991). Lee L.W., et al.Biochim. Biophys. Acta 1037:178-185(1990). Lubec G., et al.Submitted (MAR-2007) to UniProtKB.