

# PSMA2 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP6824d

# **Specification**

# PSMA2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

P25787

# PSMA2 Antibody (N-term) Blocking Peptide - Additional Information

**Gene ID 5683** 

#### **Other Names**

Proteasome subunit alpha type-2, Macropain subunit C3, Multicatalytic endopeptidase complex subunit C3, Proteasome component C3, PSMA2, HC3, PSC3

# **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/products/AP6824d>AP6824d</a> was selected from the N-term region of human PSMA2. 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.

### PSMA2 Antibody (N-term) Blocking Peptide - Protein Information

Name PSMA2

Synonyms HC3, PSC3

### **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).

### **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 (PubMed:34711951) Colocalizes with TRIM5 in cytoplasmic bodies (By similarity) {ECO:0000250|UniProtKB:P49722, ECO:0000269|PubMed:34711951}

## PSMA2 Antibody (N-term) Blocking Peptide - Protocols

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

### Blocking Peptides

PSMA2 Antibody (N-term) Blocking Peptide - Images

## PSMA2 Antibody (N-term) Blocking Peptide - 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. PSMA2 may have a potential regulatory effect on another component(s) of the proteasome complex through tyrosine phosphorylation.

# PSMA2 Antibody (N-term) Blocking Peptide - References

Rush, J., et.al., Nat. Biotechnol. 23 (1), 94-101 (2005)