

PSMD2 Antibody (N-term) Blocking Peptide Synthetic peptide

Catalog # BP14349a

Specification

PSMD2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>Q13200</u>

PSMD2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 5708

Other Names

26S proteasome non-ATPase regulatory subunit 2, 26S proteasome regulatory subunit RPN1, 26S proteasome regulatory subunit S2, 26S proteasome subunit p97, Protein 5511, Tumor necrosis factor type 1 receptor-associated protein 2, PSMD2, TRAP2

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.

PSMD2 Antibody (N-term) Blocking Peptide - Protein Information

Name PSMD2

Synonyms TRAP2

Function

Component of the 26S proteasome, a multiprotein complex involved in the ATP-dependent degradation of ubiquitinated proteins. This complex plays a key role in the maintenance of protein homeostasis by removing misfolded or damaged proteins, which could impair cellular functions, and by removing proteins whose functions are no longer required. Therefore, the proteasome participates in numerous cellular processes, including cell cycle progression, apoptosis, or DNA damage repair.

Tissue Location

Found in skeletal muscle, liver, heart, brain, kidney, pancreas, lung and placenta

PSMD2 Antibody (N-term) Blocking Peptide - Protocols



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

<u>Blocking Peptides</u>

PSMD2 Antibody (N-term) Blocking Peptide - Images

PSMD2 Antibody (N-term) Blocking Peptide - Background

The 26S proteasome is a multicatalytic proteinase complexwith a highly ordered structure composed of 2 complexes, a 20S coreand a 19S regulator. The 20S core is composed of 4 rings of 28non-identical subunits; 2 rings are composed of 7 alpha subunitsand 2 rings are composed of 7 beta subunits. The 19S regulator iscomposed of a base, which contains 6 ATPase subunits and 2non-ATPase subunits, and a lid, which contains up to 10 non-ATPasesubunits. Proteasomes are distributed throughout eukaryotic cellsat a high concentration and cleave peptides in anATP/ubiquitin-dependent process in a non-lysosomal pathway. Anessential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. This gene encodes one of the non-ATPase subunits of the 19S regulator lid. In addition toparticipation in proteasome function, this subunit may alsoparticipate in the TNF signalling pathway since it interacts with the tumor necrosis factor type 1 receptor. A pseudogene has beenidentified on chromosome 1.

PSMD2 Antibody (N-term) Blocking Peptide - References

Ikeda, Y., et al. J. Biol. Chem. 284(50):34889-34900(2009)Smith, L., et al. Neoplasia 11(11):1194-1207(2009)McCauley, J.L., et al. Genes Immun. 10(7):624-630(2009)Djakovic, S.N., et al. J. Biol. Chem. 284(39):26655-26665(2009)Venkatesan, K., et al. Nat. Methods 6(1):83-90(2009)