10320 Camino Santa Fe, Suite G
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PSMD10 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP14586b

Specification

PSMD10 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession O75832

PSMD10 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 5716

Other Names
26S proteasome non-ATPase regulatory subunit 10, 26S proteasome regulatory subunit p28, Gankyrin, p28(GANK), PSMD10

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.

PSMD10 Antibody (C-term) Blocking Peptide - Protein Information

Name PSMD10

Function
Acts as a chaperone during the assembly of the 26S proteasome, specifically of the PA700/19S regulatory complex (RC). In the initial step of the base subcomplex assembly is part of an intermediate PSMD10:PSMC4:PSMC5:PAAF1 module which probably assembles with a PSMD5:PSMC2:PSMC1:PSMD2 module. Independently of the proteasome, regulates EGF-induced AKT activation through inhibition of the RHOA/ROCK/PTEN pathway, leading to prolonged AKT activation. Plays an important role in RAS-induced tumorigenesis.

Cellular Location
Cytoplasm. Nucleus

Tissue Location
Tends to be up-regulated in cancer cells with RAS mutations, including lung cancers and adenocarconimas (at protein level).

PSMD10 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

PSMD10 Antibody (C-term) Blocking Peptide - Images

PSMD10 Antibody (C-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 anon-ATPase subunit of the 19S regulator. Two transcripts encodingdifferent isoforms have been described. Pseudogenes have beenidentified on chromosomes 3 and 20.

PSMD10 Antibody (C-term) Blocking Peptide - References

Meng, Y., et al. Cancer Lett. 297(1):9-17(2010)Man, J.H., et al. J. Clin. Invest. 120(8):2829-2841(2010)Piton, A., et al. Mol. Psychiatry (2010) In press :Serquera, D., et al. Biophys. J. 98(7):1294-1301(2010)Tang, S., et al. Cancer Biol. Ther. 9(2):88-95(2010)