

PSMD14 Antibody (C-term) Blocking Peptide Synthetic peptide

Catalog # BP19256b

Specification

PSMD14 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>000487</u>

PSMD14 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 10213

Other Names

26S proteasome non-ATPase regulatory subunit 14, 3419-, 26S proteasome regulatory subunit RPN11, 26S proteasome-associated PAD1 homolog 1, PSMD14, POH1

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.

PSMD14 Antibody (C-term) Blocking Peptide - Protein Information

Name PSMD14

Synonyms POH1

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. The PSMD14 subunit is a metalloprotease that specifically cleaves 'Lys-63'-linked polyubiquitin chains within the complex. Plays a role in response to double-strand breaks (DSBs): acts as a regulator of non-homologous end joining (NHEJ) by cleaving 'Lys-63'-linked polyubiquitin, thereby promoting retention of JMJD2A/KDM4A on chromatin and restricting TP53BP1 accumulation. Also involved in homologous recombination repair by promoting RAD51 loading.

Tissue Location

Widely expressed. Highest levels in heart and skeletal muscle.



PSMD14 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

PSMD14 Antibody (C-term) Blocking Peptide - Images

PSMD14 Antibody (C-term) Blocking Peptide - Background

PSMD14 is a component of the 26S proteasome, amultiprotein complex that degrades proteins targeted fordestruction by the ubiquitin pathway (Spataro et al., 1997 [PubMed9374539]).

PSMD14 Antibody (C-term) Blocking Peptide - References

Byrne, A., et al. Exp. Cell Res. 316(2):258-271(2010)Ma, Z., et al. Pediatr Int 51(5):732-735(2009)Cooper, E.M., et al. EMBO J. 28(6):621-631(2009)Koulich, E., et al. Mol. Biol. Cell 19(3):1072-1082(2008)Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :