

PSMD8 (P-12): sc-161177

BACKGROUND

In eukaryotic cells, the selective breakdown of cellular proteins is ensured by their ubiquitination and subsequent degradation by the 26S proteasome. The 26S proteasome is a protease complex that selectively breaks down proteins that have been modified by polyubiquitin chains. It is made up of two multi-subunit complexes: the 20S proteasome chamber, which serves as the proteolytic core of the complex, and two 19S regulatory particles, which recognize and unfold ubiquitinated proteins. PSMD8 (proteasome (prosome, macropain) 26S subunit, non-ATPase, 8), also known as HIP6, HYPF, Nin1p, Rpn12, S14 or p31, is a 257 amino acid protein and regulatory component of the 26S proteasome belonging to the proteasome subunit S14 family. PSMD8 is required for the activation of CDC28 kinase, and is encoded by a gene that maps to human chromosome 19q13.2.

REFERENCES

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2. Kominami, K., et al. 1995. Nin1p, a regulatory subunit of the 26S proteasome, is necessary for activation of Cdc28p kinase of *Saccharomyces cerevisiae*. *EMBO J.* 14: 3105-3115.
3. Zhou, J., et al. 1996. Expression of early lung cancer detection marker p31 in neoplastic and non-neoplastic respiratory epithelium. *Lung Cancer* 14: 85-97.
4. Bosak, N., et al. 2003. Construction of a high-resolution comparative gene map between swine chromosome region 6q11 → q21 and human chromosome 19 q-arm by RH mapping of 51 genes. *Cytogenet. Genome Res.* 102: 109-115.
5. Shibahara, T., et al. 2004. Mass spectrometric analysis of expression of ATPase subunits encoded by duplicated genes in the 19S regulatory particle of rice 26S proteasome. *Arch. Biochem. Biophys.* 421: 34-41.
6. Tan, Y., et al. 2006. Effects of tumor necrosis factor- α on the 26S proteasome and 19S regulator in skeletal muscle of severely scalded mice. *J. Burn Care Res.* 27: 226-233.
7. Wang, X., et al. 2007. Mass spectrometric characterization of the affinity-purified human 26S proteasome complex. *Biochemistry* 46: 3553-3565.

CHROMOSOMAL LOCATION

Genetic locus: PSMD8 (human) mapping to 19q13.2; Psm8 (mouse) mapping to 7 B1.

SOURCE

PSMD8 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PSMD8 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161177 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PSMD8 (P-12) is recommended for detection of PSMD8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other PSMD family members.

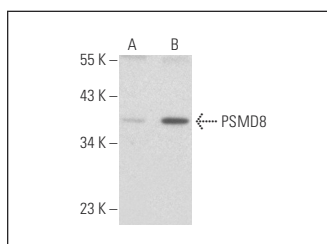
PSMD8 (P-12) is also recommended for detection of PSMD8 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PSMD8 siRNA (h): sc-97286, PSMD8 siRNA (m): sc-152563, PSMD8 shRNA Plasmid (h): sc-97286-SH, PSMD8 shRNA Plasmid (m): sc-152563-SH, PSMD8 shRNA (h) Lentiviral Particles: sc-97286-V and PSMD8 shRNA (m) Lentiviral Particles: sc-152563-V.

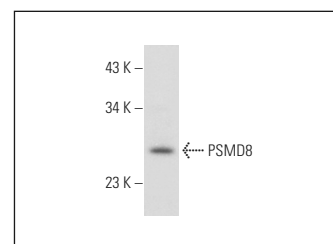
Molecular Weight of PSMD8: 36 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MIA PaCa-2 cell lysate: sc-2285 or ES-2 cell lysate: sc-24674.

DATA



PSMD8 (P-12): sc-161177. Western blot analysis of PSMD8 expression in HeLa (A) and ES-2 (B) whole cell lysates.



PSMD8 (P-12): sc-161177. Western blot analysis of PSMD8 expression in MIA PaCa-2 whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **PSMD8 (H-11): sc-514053** or **PSMD8 (A-1): sc-398619**, our highly recommended monoclonal alternatives to PSMD8 (P-12).