SANTA CRUZ BIOTECHNOLOGY, INC.

PSMD5 (H-300): sc-366069

BACKGROUND

In eukaryotic cells, 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 multisubunit 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. PSMD5 (proteasome (prosome, macropain) 26S subunit, non-ATPase 5), also known as S5B (S5 basic), is a regulatory component of the 26S proteasome. More specifically, PSMD5 is a subunit of the 19S regulator base and associates in a heterotrimer with PSMC1 and PSMC2. It contains nine di-leucine repeats and a motif similar to the tyrosine-based motif, suggesting a role for PSMD5 in trafficking, targeting and/or internalization.

REFERENCES

1. Deveraux, Q., et al. 1994. A 26 S protease subunit that binds ubiquitin conjugates. J. Biol. Chem. 269: 7059-7061.
2. Nomura, N., et al. 1994. Prediction of the coding sequences of unidentified human genes. II. The coding sequences of 40 new genes (KIAA0041-KIAA0080) deduced by analysis of cDNA clones from human cell line KG-1. DNA Res. 1: 223-229.

CHROMOSOMAL LOCATION

Genetic locus: PSMD5 (human) mapping to 9q33.2; Psmd5 (mouse) mapping to 2 B.

SOURCE

PSMD5 (H-300) is a rabbit polyclonal antibody raised against amino acids 205-504 mapping at the C-terminus of PSMD5 of human origin.

PRODUCT

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

APPLICATIONS

PSMD5 (H-300) is recommended for detection of PSMD5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

PSMD5 (H-300) is also recommended for detection of PSMD5 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for PSMD5 siRNA (h): sc-92791, PSMD5 siRNA (m): sc-152561, PSMD5 shRNA Plasmid (h): sc-92791-SH, PSMD5 shRNA Plasmid (m): sc-152561-SH, PSMD5 shRNA (h) Lentiviral Particles: sc-92791-V and PSMD5 shRNA (m) Lentiviral Particles: sc-152561-V.

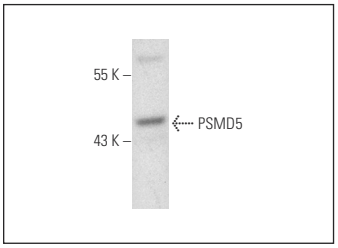
Molecular Weight of PSMD5: 50 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PSMD5 (H-300): sc-366069. Western blot analysis of PSMD5 expression in HeLa whole cell lysate.

STORAGE

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

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.