

PSMD13 (T-13): sc-109411

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. PSMD13 (prosome (prosome, macropain) 26S subunit, non-ATPase, 13), also known as S11, Rpn9, p40.5 or HSPC027, is a 376 amino acid protein that belongs to the proteasome subunit S11 family. PSMD13 acts as a regulatory subunit of the 26S Proteasome, which is involved in the ATP-dependent degradation of ubiquitinated proteins.

REFERENCES

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4. Thompson, H.G., et al. 2004. Post-translationally modified S12, absent in transformed breast epithelial cells, is not associated with the 26S Proteasome and is induced by proteasome inhibitor. *Int. J. Cancer* 111: 338-347.
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6. Wang, Z., et al. 2006. Prostaglandin J2 alters pro-survival and pro-death gene expression patterns and 26S Proteasome assembly in human neuroblastoma cells. *J. Biol. Chem.* 281: 21377-21386.
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CHROMOSOMAL LOCATION

Genetic locus: PSMD13 (human) mapping to 11p15.5; Psm13 (mouse) mapping to 7 F5.

RESEARCH USE

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

SOURCE

PSMD13 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PSMD13 of human origin.

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-109411 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PSMD13 (T-13) is recommended for detection of PSMD13 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

PSMD13 (T-13) is also recommended for detection of PSMD13 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PSMD13 siRNA (h): sc-96416, PSMD13 siRNA (m): sc-152559, PSMD13 shRNA Plasmid (h): sc-96416-SH, PSMD13 shRNA Plasmid (m): sc-152559-SH, PSMD13 shRNA (h) Lentiviral Particles: sc-96416-V and PSMD13 shRNA (m) Lentiviral Particles: sc-152559-V.

Molecular Weight of PSMD13: 43 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

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