SANTA CRUZ BIOTECHNOLOGY, INC.

PSMD12 (N-12): sc-107976

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 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. PSMD12 (proteasome (prosome, macropain) 26S subunit, non-ATPase, 12), also known as p55 or Rpn5, is a 456 amino acid protein belonging to the proteasome subunit p55 family. PSMD12 acts as a regulatory subunit of the 26S Proteasome and is a component of the PA700 complex. PSMD12 contains one PCI domain.

CHROMOSOMAL LOCATION

Genetic locus: PSMD12 (human) mapping to 17q24.2; Psmd12 (mouse) mapping to 11 E1.

SOURCE

PSMD12 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of PSMD12 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.

Blocking peptide available for competition studies, sc-107976 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

PSMD12 (N-12) is recommended for detection of PSMD12 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); non cross-reactive with other PSMD family members.

PSMD12 (N-12) is also recommended for detection of PSMD12 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PSMD12 siRNA (h): sc-93915, PSMD12 siRNA (m): sc-152558, PSMD12 shRNA Plasmid (h): sc-93915-SH, PSMD12 shRNA Plasmid (m): sc-152558-SH, PSMD12 shRNA (h) Lentiviral Particles: sc-93915-V and PSMD12 shRNA (m) Lentiviral Particles: sc-152558-V.

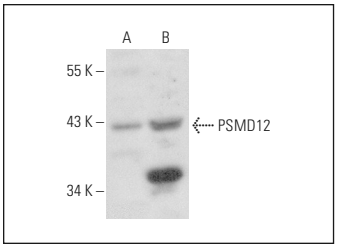
Molecular Weight of PSMD12: 53 kDa.

Positive Controls: COLO 320DM cell lysate: sc-2226 or T24 cell lysate: sc-2292.

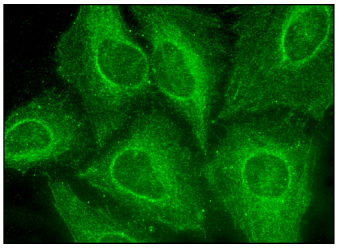
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



PSMD12 (N-12): sc-107976. Western blot analysis of PSMD12 expression in COLO 320DM (**A**) and T24 (**B**) whole cell lysates.



PSMD12 (N-12): sc-107976. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and membrane localization.

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 **PSMD12 (H-3): sc-398279** or **PSMD12 (H-8): sc-393401**, our highly recommended monoclonal alternatives to PSMD12 (N-12).