SANTA CRUZ BIOTECHNOLOGY, INC.

PWP1 (C-5): sc-390188

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

PWP1 (periodic tryptophan protein 1), also known as IEF SSP 9502 or endonuclein, is a 501 amino acid protein that is the human homolog of the *Saccharomyces cerevisiae* periodic Trp protein. Localized to the nucleus and expressed highly in the kidneys, pancreas, placenta and skeletal muscle, PWP1 is thought to play an important role in transcription and cell growth. In yeast, PWP1 is a histone tail-associated protein that interacts with chromatin through the H4 tail. PWP1 contains five WD-repeats and may participate in the development of pancreatic cancer. It is implicated in regulating chaperone activities in the ER and signal transduction pathways in the nucleus.

CHROMOSOMAL LOCATION

Genetic locus: PWP1 (human) mapping to 12q23.3; Pwp1 (mouse) mapping to 10 C1.

SOURCE

PWP1 (C-5) is a mouse monoclonal antibody raised against a peptide mapping within an internal region of PWP1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_3 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390188 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

PWP1 (C-5) is recommended for detection of PWP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PWP1 (C-5) is also recommended for detection of PWP1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PWP1 siRNA (h): sc-95942, PWP1 siRNA (m): sc-152597, PWP1 shRNA Plasmid (h): sc-95942-SH, PWP1 shRNA Plasmid (m): sc-152597-SH, PWP1 shRNA (h) Lentiviral Particles: sc-95942-V and PWP1 shRNA (m) Lentiviral Particles: sc-152597-V.

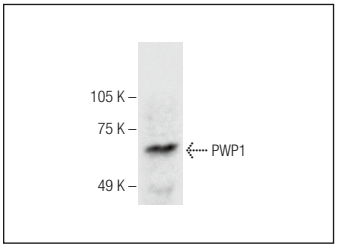
Molecular Weight of PWP1: 79 kDa.

Positive Controls: C32 nuclear extract: sc-2136, Sol8 nuclear extract: sc-2157 or NIH/3T3 nuclear extract: sc-2138.

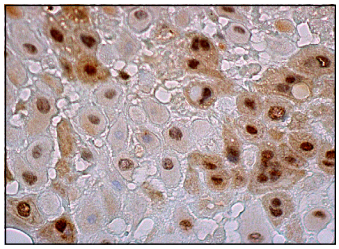
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



PWP1 (C-5): sc-390188. Western blot analysis of PWP1 expression in C32 nuclear extract.



PWP1 (C-5): sc-390188. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing nuclear, or nuclear and cytoplasmic staining of decidual cells.

SELECT PRODUCT CITATIONS

1. Wei, L., et al. 2020. PWP1 promotes the malignant phenotypes of lung cancer cells by interacting with DVL2 and Merlin. Onco Targets Ther. 13: 10025-10037.
2. Jiang, M., et al. 2024. PWP1 transcriptionally regulates p53, modulating apoptosis and cell cycle to promote gastric cancer progression. Apoptosis 30: 693-709.

RESEARCH USE

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

PROTOCOLS

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