

PACp (H-115): sc-134488

BACKGROUND

Human prostatic acid phosphatase (also known as PACp, PAP, PPAP) is a prostate epithelium-specific differentiation antigen. The cellular form of PACp functions as a neutral protein-tyrosine phosphatase and is involved in regulating prostate cell growth. Specifically, PACp catalyzes the conversion of orthophosphoric monoester to alcohol and orthophosphate. PACp is synthesized under androgen regulation. The stimulated secretion of prostatic acid phosphatase is a hallmark of androgen action on human prostate epithelial cells, implicating PACp as a useful tool in identifying atrophy of prostatic tissue. Cellular PACp can downregulate prostate cancer cell growth, at least partially by dephosphorylating c-ErbB-2/Neu. Therefore, decreased cellular PACp expression in cancer cells may be involved in prostate cancer progression. PACp is the protein product of the human ACPp gene, which maps to chromosome 3q22.1.

CHROMOSOMAL LOCATION

Genetic locus: ACPp (human) mapping to 3q22.1; Acpp (mouse) mapping to 9 F1.

SOURCE

PACp (H-115) is a rabbit polyclonal antibody raised against amino acids 146-260 mapping within an internal region of PACp 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.

STORAGE

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

APPLICATIONS

PACp (H-115) is recommended for detection of PACp 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).

PACp (H-115) is also recommended for detection of PACp in additional species, including equine and bovine.

Suitable for use as control antibody for PACp siRNA (h): sc-72131, PACp siRNA (m): sc-39120, PACp shRNA Plasmid (h): sc-72131-SH, PACp shRNA Plasmid (m): sc-39120-SH, PACp shRNA (h) Lentiviral Particles: sc-72131-V and PACp shRNA (m) Lentiviral Particles: sc-39120-V.

Molecular Weight (predicted) of PACp isoform 1/2: 45/48 kDa.

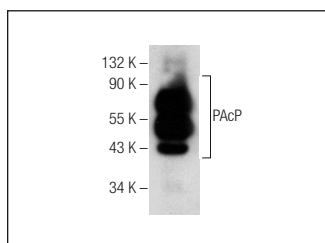
Molecular Weight (observed) of PACp: 45-50 kDa.

Positive Controls: LNCaP cell lysate: sc-2231 or human prostate extract: sc-363774.

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



PACp (H-115): sc-134488. Western blot analysis of PACp expression in human prostate tissue extract.

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 **PACp (PAP-1): sc-69858** or **PACp (D-12): sc-390118**, our highly recommended monoclonal alternatives to PACp (H-115).