

PACP (LT-3D1): sc-101380

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.

REFERENCES

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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 for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: ACPP (human) mapping to 3q22.1.

SOURCE

PACP (LT-3D1) is a mouse monoclonal antibody genetically immunized with cDNA encoding PACP of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PACP (LT-3D1) is available conjugated to either phycoerythrin (sc-101380 PE) or fluorescein (sc-101380 FITC), 200 μ g/ml, for IF, IHC(P) and FCM.

APPLICATIONS

PACP (LT-3D1) is recommended for detection of PACP of human origin by flow cytometry (1 μ g per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

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

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

RESEARCH USE

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