

PSA (LT3D2): sc-101384

BACKGROUND

Prostate specific antigen (PSA), also designated γ -seminoprotein, seminin, p30 antigen, semenogelase and kallikrein 3 (KLK3), was first identified as a glycoprotein in human seminal plasma. PSA was determined by sequence similarity to be a member of the kallikrein subfamily of trypsin proteases. PSA is a serine protease that hydrolyzes the major human seminal protein, the seminal plasma mobility inhibitor precursor, or semenogelin I (SPMIP or Sgl), which leads to semen liquification. PSA production and expression are highest in normal, benign hyperplastic and cancerous tissues of the prostate, although PSA has also been detected in accessory male sex glands and in breast cancer. PSA has been identified as an aid in the early detection of prostate cancer and is a commonly used tumor marker.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic Locus: KLK3 (human) mapping to 19q13.33.

SOURCE

PSA (LT3D2) is a mouse monoclonal antibody genetically immunized with cDNA encoding PSA of human origin.

STORAGE

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

PRODUCT

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

PSA (LT3D2) is available conjugated to either phycoerythrin (sc-101384 PE) or fluorescein (sc-101384 FITC), 200 μ g/ml, for IF, IHC(P) and FCM.

APPLICATIONS

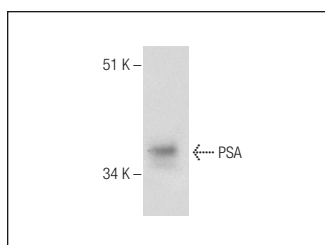
PSA (LT3D2) is recommended for detection of PSA of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], flow cytometry (1 μ g per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PSA siRNA (h): sc-29458, PSA shRNA Plasmid (h): sc-29458-SH and PSA shRNA (h) Lentiviral Particles: sc-29458-V.

Molecular Weight of PSA: 34 kDa.

Positive Controls: human prostate extract: sc-363774, COLO 320DM cell lysate: sc-2226 or LNCaP cell lysate: sc-2231.

DATA



PSA (LT3D2): sc-101384. Western blot analysis of PSA 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.



See **PSA (A67-B/E3): sc-7316** for PSA antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.