

Prostasin (h): 293T Lysate: sc-170169

BACKGROUND

Prostasin, a serine protease first identified in prostate tissue, activates epithelial sodium channels in a variety of tissues. Though typically a membrane-anchored protein, free Prostasin is also found in physiologic fluids and tissue culture media, indicating a mechanism for secretion from the cells as well. Aprotinin and other protease inhibitors suppress the channel-activating capacity of Prostasin, while aldosterone increases Prostasin expression and stimulates sodium uptake. In addition, DNA methylation negatively correlates with Prostasin expression in cancer cells, while enforced reexpression decreases invasiveness as well as metastatic potential, implying that Prostasin activity reflects epithelial cell physiology.

REFERENCES

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2. Narikiyo, T., Kitamura, K., Adachi, M., Miyoshi, T., Iwashita, K., Shiraishi, N., Nonoguchi, H., Chen, L.M., Chai, K.X., Chao, J. and Tomita, K. 2002. Regulation of Prostasin by aldosterone in the kidney. *J. Clin. Invest.* 109: 401-408.
3. Chen, L.M. and Chai, K.X. 2002. Prostasin serine protease inhibits breast cancer invasiveness and is transcriptionally regulated by promoter DNA methylation. *Int. J. Cancer* 97: 323-329.
4. Wang, C., Chao, J. and Chao, L. 2003. Adenovirus-mediated human Prostasin gene delivery is linked to increased aldosterone production and hypertension in rats. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 284: 1031-1036.
5. Iwashita, K., Kitamura, K., Narikiyo, T., Adachi, M., Shiraishi, N., Miyoshi, T., Nagano, J., Tuyen, D.G., Nonoguchi, H. and Tomita, K. 2003. Inhibition of Prostasin secretion by serine protease inhibitors in the kidney. *J. Am. Soc. Nephrol.* 14: 11-16.

CHROMOSOMAL LOCATION

Genetic locus: PRSS8 (human) mapping to 16p11.2.

PRODUCT

Prostasin (h): 293T Lysate represents a lysate of human Prostasin transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Prostasin (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Prostasin antibodies. Recommended use: 10-20 µl per lane.

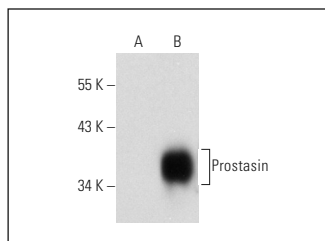
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Prostasin (2): sc-136272 is recommended as a positive control antibody for Western Blot analysis of enhanced human Prostasin expression in Prostasin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

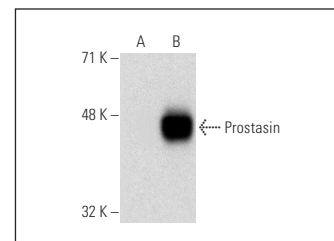
STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

DATA



Prostasin (2): sc-136272. Western blot analysis of Prostasin expression in non-transfected: sc-117752 (A) and human Prostasin transfected: sc-170169 (B) 293T whole cell lysates.



Prostasin (2): sc-136272. Western blot analysis of Prostasin expression in non-transfected: sc-117752 (A) and human Prostasin transfected: sc-170169 (B) 293T whole cell lysates.

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.