

PDEF (h2): 293T Lysate: sc-177713

BACKGROUND

Prostate epithelium-specific Ets transcription factor (PDEF), also designated prostate Ets or SAM pointed domain-containing Ets transcription factor, is a 335 amino acid nuclear protein. PDEF belongs to the Ets family of proteins. This protein, which localizes to prostate epithelial cells, functions as an Ets transcription factor. It upregulates the activity of the p62 promoter but this activity can be downregulated by PSI. It is also involved in the activation of prostate-specific antigen (PSA) by acting as an androgen-independent transactivator.

REFERENCES

1. Oettgen, P., et al. 2000. PDEF, a novel prostate epithelium-specific Ets transcription factor, interacts with the androgen receptor and activates prostate-specific antigen gene expression. *J. Biol. Chem.* 275: 1216-1225.
2. Yamada, N., et al. 2000. Cloning and expression of the mouse Pse gene encoding a novel Ets family member. *Gene* 241: 267-274.
3. Chen, H., et al. 2002. Nkx-3.1 interacts with prostate-derived Ets factor and regulates the activity of the PSA promoter. *Cancer Res.* 62: 338-340.
4. Feldman, R.J., et al. 2003. PDEF expression in human breast cancer is correlated with invasive potential and altered gene expression. *Cancer Res.* 63: 4626-4631.
5. Thompson, H.G., et al. 2003. p62 overexpression in breast tumors and regulation by prostate-derived Ets factor in breast cancer cells. *Oncogene* 22: 2322-2333.
6. Chen, H., et al. 2005. Structural and functional analysis of domains mediating interaction between Nkx-3.1 and PDEF. *J. Cell. Biochem.* 94: 168-177.
7. Wang, Y., et al. 2005. Analysis of the 2.0A crystal structure of the protein-DNA complex of the human PDEF Ets domain bound to the prostate specific antigen regulatory site. *Biochemistry* 44: 7095-7106.

CHROMOSOMAL LOCATION

Genetic locus: SPDEF (human) mapping to 6p21.31.

PRODUCT

PDEF (h2): 293T Lysate represents a lysate of human PDEF transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

PDEF (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive PDEF antibodies. Recommended use: 10-20 µl per lane.

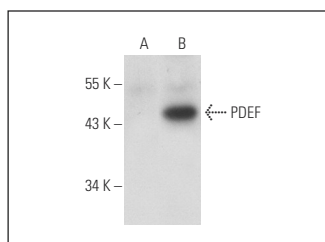
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PDEF (G-10): sc-166846 is recommended as a positive control antibody for Western Blot analysis of enhanced human PDEF expression in PDEF transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



PDEF (G-10): sc-166846. Western blot analysis of PDEF expression in non-transfected: sc-117752 (A) and human PDEF transfected: sc-177713 (B) 293T whole cell lysates.

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.

PROTOCOLS

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