SANTA CRUZ BIOTECHNOLOGY, INC.

acrogranin (R-18): sc-11349

BACKGROUND

PC cell-derived growth factor (PCDGF, also designated epithelin/ granulin precursor, paragranulin, or acrogranin) is an 88 kDa glycosylated protein originally purified from the highly tumorigenic Insulin-independent mouse teratoma PC cell line. PCDGF is a cysteine-rich molecule that contains 20 kDa of carbohydrate. PCDGF expression is essential for tumorigenicity in teratoma cells. PCDGF is expressed in estrogen receptor-positive (ER^+) human mammary MDA-MB-468 epithelial cells, human breast cancer MCF-7 cells and human estrogen-responsive T47D cells. Secreted PCDGF acts as an autocrine growth factor for breast carcinoma cells and overexpression may play an important role in human breast cancer. PCDGF stimulates the growth of PC cells as well as 3T3 fibroblasts. The gene encoding PCDGF maps to human chromosome 17q21.32.

REFERENCES

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3. Zhang, H., et al. 1998. Inhibition of tumorigenicity of the teratoma PC cell line by transfection with antisense cDNA for PC cell-derived growth factor (PCDGF, epithelin/granulin precursor). Proc. Natl. Acad. Sci. USA 95: 14202-14207.
4. Xia, X., et al. 1998. Identification of cell surface binding sites for PC-cell-derived growth factor, PCDGF, (epithelin/granulin precursor) on epithelial cells and fibroblasts. Biochem. Biophys. Res. Commun. 245: 539-543.
5. Thornton, M.A., et al. 1999. The human platelet α-IIb gene is not closely linked to its integrin partner β-3. Blood 94: 2039-2047.
6. Lu, R., et al. 1999. Stimulation of PC cell-derived growth factor (epithelin/granulin precursor) expression by estradiol in human breast cancer cells.Biochem. Biophys. Res. Commun. 256: 204-207.
7. Lu, R., et al. 2000. Inhibition of PC cell-derived growth factor (PCDGF, epithelin/granulin precursor) expression by antisense PCDGF cDNA transfection inhibits tumorigenicity of the human breast carcinoma cell line MDA-MB-468. Proc. Natl. Acad. Sci. USA 97: 3993-3998.

SOURCE

acrogranin (R-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PCDGF of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-11349 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

acrogranin (R-18) is recommended for detection of precursor and mature acrogranin of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for acrogranin siRNA (m): sc-39262, acrogranin shRNA Plasmid (m): sc-39262-SH and acrogranin shRNA (m) Lentiviral Particles: sc-39262-V.

Molecular Weight of acrogranin: 88 kDa.

Positive Controls: 3611-RF whole cell lysate: sc-2215.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

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.