

# acrogranin (H-300): sc-28928

## BACKGROUND

Acrogranin (also designated PC cell-derived growth factor (PCDGF), epithelin/granulin precursor or paraganulin) is a glycosylated protein originally purified from the highly tumorigenic, Insulin-independent mouse teratoma PC cell line. Acrogranin is a cysteine-rich molecule whose expression is essential for tumorigenicity in teratoma cells. Acrogranin is expressed in estrogen receptor-positive (ER<sup>+</sup>) human mammary MDA-MB-468 epithelial cells, human breast cancer MCF7 cells and human estrogen-responsive T-47D cells. Secreted acrogranin acts as an autocrine growth factor for breast carcinoma cells and over-expression may play an important role in human breast cancer. Acrogranin stimulates the growth of PC cells as well as 3T3 fibroblasts.

## REFERENCES

1. Zhou, J., et al. 1993. Purification of an autocrine growth factor homologous with mouse epithelin precursor from a highly tumorigenic cell line. *J. Biol. Chem.* 268: 10863-10869.
2. Baba, T., et al. 1993. Acrogranin, an acrosomal cysteine-rich glycoprotein, is the precursor of the growth-modulating peptides, granulins, and epithelins, and is expressed in somatic as well as male germ cells. *Mol. Reprod. Dev.* 34: 233-243.
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.

## SOURCE

acrogranin (H-300) is a rabbit polyclonal antibody raised against amino acids 21-320 mapping near the N-terminus of acrogranin of human origin.

## PRODUCT

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

## APPLICATIONS

acrogranin (H-300) is recommended for detection of precursor and mature acrogranin; paraganulin; and granulin 1, granulin 2, granulin 3, granulin 4 and granulin 7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

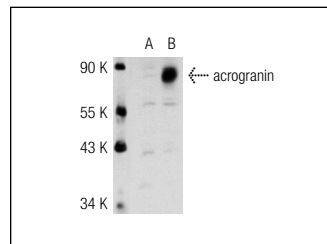
Molecular Weight of acrogranin: 88 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, acrogranin (h): 293T Lysate: sc-113573 or 3T3-L1 cell lysate: sc-2243.

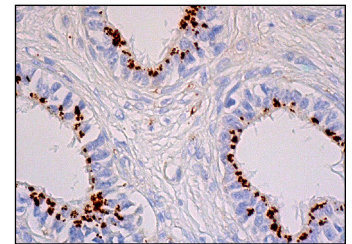
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



acrogranin (H-300): sc-28928. Western blot analysis of acrogranin expression in non-transfected: sc-117752 (A) and human acrogranin transfected: sc-113573 (B) 293T whole cell lysates.



acrogranin (H-300): sc-28928. Immunoperoxidase staining of formalin fixed, paraffin-embedded human epididymis tissue showing cytoplasmic staining of glandular cells.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **acrogranin (C-11): sc-377036** or **acrogranin (2A3C5): sc-81151**, our highly recommended monoclonal alternatives to acrogranin (H-300).