

# APRIN (2030D32a): sc-81635

## BACKGROUND

APRIN (androgen-induced proliferation inhibitor), also known as androgen shut-off 3 (AS3) or PDS5 regulator of cohesion maintenance homolog B (PDS5B), is required for androgen-dependent growth arrest in prostate cells. It mediates the androgen regulated cell cycle arrest in the G<sub>0</sub>/G<sub>1</sub> phase of prostate epithelial cells. APRIN is a highly conserved protein containing a nuclear localization sequence near the C-terminal, a DNA binding domain, a coiled-coil domain, a leucine zipper and a protein kinase domain. It is expressed in smooth muscle stromal cells and basal and luminal epithelial cells, localizing to the nucleus. APRIN is related to the fungal proteins *Aspergillus* bimD and *Sordaria* Spo76p. APRIN may also function as a transcription factor and protein kinase. A loss of the gene encoding APRIN strongly correlates with prostate cancer.

## REFERENCES

- Geck, P., et al. 1999. Early gene expression during androgen-induced inhibition of proliferation of prostate cancer cells: a new suppressor candidate on chromosome 13, in the BRCA2-Rb1 locus. *J. Steroid Biochem. Mol. Biol.* 68: 41-50.
- van Heemst, D., et al. 1999. Spo76p is a conserved chromosome morphogenesis protein that links the mitotic and meiotic programs. *Cell* 98: 261-271.
- Geck, P., et al. 2000. Androgen-induced proliferative quiescence in prostate cancer cells: the role of AS3 as its mediator. *Proc. Natl. Acad. Sci. USA* 97: 10185-10190.
- Harada, H., et al. 2001. Polymorphism and allelic loss at the AS3 locus on 13q12-13 in esophageal squamous cell carcinoma. *Int. J. Oncol.* 18: 1003-1007.
- Maffini, M.V., et al. 2002. Mechanism of androgen action on cell proliferation: AS3 protein as a mediator of proliferative arrest in the rat prostate. *Endocrinology* 143: 2708-2714.
- Shain, S.A. 2004. Exogenous fibroblast growth factors maintain viability, promote proliferation, and suppress GADD 45 $\alpha$  and Gas6 transcript content of prostate cancer cells genetically modified to lack endogenous FGF-2. *Mol. Cancer Res.* 2: 653-661.
- Tournier, I., et al. 2004. Significant contribution of germline BRCA2 rearrangements in male breast cancer families. *Cancer Res.* 64: 8143-8147.
- Rankin, S., et al. 2005. Sororin, a substrate of the anaphase-promoting complex, is required for sister chromatid cohesion in vertebrates. *Mol. Cell* 18: 185-200.
- Murthy, S., et al. 2005. Androgen receptor signaling and vitamin D receptor action in prostate cancer cells. *Prostate* 64: 362-372.

## CHROMOSOMAL LOCATION

Genetic locus: PDS5B (human) mapping to 13q13.1; Pds5b (mouse) mapping to 5 G3.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## SOURCE

APRIN (2030D32a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to the C-terminal region of APRIN of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

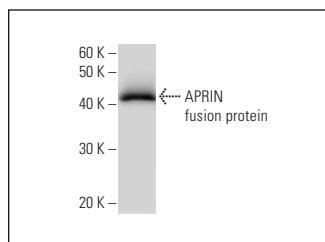
## APPLICATIONS

APRIN (2030D32a) is recommended for detection of APRIN of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for APRIN siRNA (h): sc-61984, APRIN siRNA (m): sc-61985, APRIN shRNA Plasmid (h): sc-61984-SH, APRIN shRNA Plasmid (m): sc-61985-SH, APRIN shRNA (h) Lentiviral Particles: sc-61984-V and APRIN shRNA (m) Lentiviral Particles: sc-61985-V.

Molecular Weight: 165 kDa.

## DATA



APRIN (2030D32a): sc-81635. Western Blot analysis of human recombinant APRIN fusion protein.

## SELECT PRODUCT CITATIONS

- Wu, Z., et al. 2022. cccDNA surrogate MC-HBV-based screen identifies cohesin complex as a novel HBV restriction factor. *Cell. Mol. Gastroenterol. Hepatol.* E-published.

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## RESEARCH USE

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