

# SPATA6 (K-23): sc-134028

## BACKGROUND

SPATA6 (spermatogenesis associated 6), also known as SRF1, is a 488 amino acid secreted protein that may be involved in spermatid maturation or sperm function. SPATA6 is expressed during embryonic development and is localized in neural tube, somites and limb buds of mouse embryo. Existing as two isoforms produced by alternative splicing events, the gene encoding SPATA6 maps to mouse chromosome 4 and human chromosome 1. Human chromosome 1 spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

## REFERENCES

1. Watson, et al. 1990. Genomic organization of the selectin family of leukocyte adhesion molecules on human and mouse chromosome 1. *J. Exp. Med.* 172: 263-272.
2. Onisto, M., et al. 2001. Evidence for FSH-dependent upregulation of SPATA2 (spermatogenesis-associated protein 2). *Biochem. Biophys. Res. Commun.* 283: 86-92.
3. Blackwood, et al. 2001. Schizophrenia and affective disorders — cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. *Am. J. Hum. Genet.* 69: 428-433.
4. Liliana Slongo, M., et al. 2003. Cloning and characterization of the promoter region of human SPATA2 (spermatogenesis-associated protein 2) gene. *Biochim. Biophys. Acta* 1625: 192-196.
5. Oh, C., et al. 2003. Characterization, expression pattern and chromosomal localization of the spermatogenesis associated 6 gene (SPATA6). *Mol. Hum. Reprod.* 9: 321-330.
6. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. *Cytogenet. Genome Res.* 108: 217-222.
7. Deng, Y., et al. 2006. Expression and identification of a novel apoptosis gene SPATA17 (MSRG-11) in mouse spermatogenic cells. *Acta Biochim. Biophys. Sin.* 38: 37-45.

## CHROMOSOMAL LOCATION

Genetic locus: SPATA6 (human) mapping to 1p33; Spata6 (mouse) mapping to 4 D1.

## SOURCE

SPATA6 (K-23) is an affinity purified rabbit polyclonal antibody raised against synthetic SPATA6 peptide of human origin.

## PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

SPATA6 (K-23) is recommended for detection of SPATA6 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SPATA6 siRNA (h): sc-78827, SPATA6 siRNA (m): sc-153724, SPATA6 shRNA Plasmid (h): sc-78827-SH, SPATA6 shRNA Plasmid (m): sc-153724-SH, SPATA6 shRNA (h) Lentiviral Particles: sc-78827-V and SPATA6 shRNA (m) Lentiviral Particles: sc-153724-V.

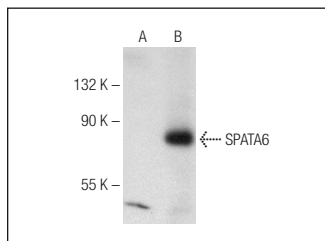
Molecular Weight of SPATA6: 50 kDa.

Positive Controls: SPATA6 (h): 293T Lysate: sc-173789 or Hep G2 cell lysate: sc-2227 or SPATA6 (m): 293T Lysate: sc-179495.

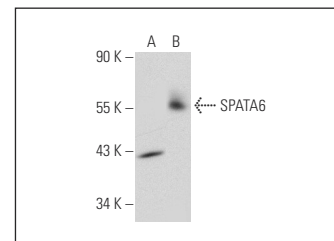
## RECOMMENDED SECONDARY REAGENTS

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).

## DATA



SPATA6 (K-23): sc-134028. Western blot analysis of SPATA6 expression in non-transfected: sc-117752 (A) and mouse SPATA6 transfected: sc-179495 (B) 293T whole cell lysates.



SPATA6 (K-23): sc-134028. Western blot analysis of SPATA6 expression in non-transfected: sc-117752 (A) and human SPATA6 transfected: sc-173789 (B) 293T whole cell lysates.

## 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.