

# SPATA25 (H-3): sc-374631

## BACKGROUND

SPATA25 (spermatogenesis-associated protein 25), also known as TSG23 (testis-specific gene 23 protein), is a 227 amino acid single-pass membrane protein that is thought to play a role in spermatogenesis. Predominantly expressed in testis, SPATA25 is found at 60-fold higher levels in adult testis than fetal testis. The gene encoding SPATA25 maps to human chromosome 20q13.12 and mouse chromosome 2 H3. Comprising approximately 2% of the human genome, chromosome 20 contains nearly 63 million bases that encode over 600 genes, some of which are associated with Creutzfeldt-Jakob disease, amyotrophic lateral sclerosis, spinal muscular atrophy, RING chromosome 20 epilepsy syndrome and Alagille syndrome. Additionally, chromosome 20 contains a region with numerous genes which are thought to be important for seminal production and may be potential targets for male contraception.

## REFERENCES

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2. Joó, J.G., et al. 2006. Trisomy 20 mosaicism and nonmosaic trisomy 20: a report of 2 cases. *J. Reprod. Med.* 51: 209-212.
3. Fulbright, R.K., et al. 2006. The imaging appearance of Creutzfeldt-Jakob disease caused by the E200K mutation. *Magn. Reson. Imaging* 24: 1121-1129.
4. Lundwall, A. 2007. A locus on chromosome 20 encompassing genes that are highly expressed in the epididymis. *Asian J. Androl.* 9: 540-544.
5. Robert, M.L., et al. 2007. Alagille syndrome with deletion 20p12.2-p12.3 and hypoplastic left heart. *Clin. Dysmorphol.* 16: 241-246.
6. Elghezel, H., et al. 2007. Ring chromosome 20 syndrome without deletions of the subtelomeric and CHRNA4—KCNQ2 genes loci. *Eur. J. Med. Genet.* 50: 441-445.
7. O'Rand, M.G., et al. 2007. Eppin: an epididymal protease inhibitor and a target for male contraception. *Soc. Reprod. Fertil. Suppl.* 63: 445-453.
8. Zhou, Y., et al. 2009. Developmental expression pattern of a novel gene, TSG23/Tsg23, suggests a role in spermatogenesis. *Mol. Hum. Reprod.* 15: 223-230.

## CHROMOSOMAL LOCATION

Genetic locus: SPATA25 (human) mapping to 20q13.12.

## SOURCE

SPATA25 (H-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 9-45 within an internal region of SPATA25 of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 200 µg IgG<sub>3</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-374631 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

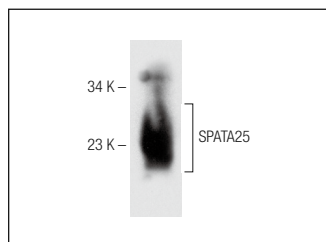
SPATA25 (H-3) is recommended for detection of SPATA25 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SPATA25 siRNA (h): sc-72715, SPATA25 shRNA Plasmid (h): sc-72715-SH and SPATA25 shRNA (h) Lentiviral Particles: sc-72715-V.

Molecular Weight of SPATA25: 24 kDa.

Positive Controls: human testis extract: sc-363781.

## DATA



SPATA25 (H-3): sc-374631. Western blot analysis of SPATA25 expression in human testis tissue extract.

## 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) for detailed protocols and support products.