

Eppin (YY-23): sc-100726

BACKGROUND

Eppin, an epididymal protease inhibitor, belongs to the WFDC family and to the telomeric cluster. The gene encoding the protein is localized to chromosome 20q12-q13 in centromeric and telomeric clusters. It expresses three mRNAs encoding two isoforms of a cysteine-rich protein that contains Kunitz-type and WAP-type (four disulfide core) protease inhibitor consensus sequences. The mouse gene lies in a cluster of putative Eppin-like genes on mouse chromosome 2. Following ejaculation, Eppin is bound to semenogelin in seminal plasma and on human spermatozoa. This complex of Eppin and Semenogelin can provide antimicrobial activity for spermatozoa. It can also provide for the preparation and survival of spermatozoa for fertility in the female reproductive tract. Eppin, which is a secreted protein, is expressed in epididymis and testis.

REFERENCES

1. Richardson, R.T., et al. 2001. Cloning and sequencing of human Eppin: a novel family of protease inhibitors expressed in the epididymis and testis. *Gene* 270: 93-102.
2. Sivashanmugam, P., et al. 2003. Characterization of mouse Eppin and a gene cluster of similar protease inhibitors on mouse chromosome 2. *Gene* 312: 125-134.
3. Karande, A., et al. 2004. Eppin: a candidate male contraceptive vaccine? *J. Biosci.* 29: 373-374.
4. Yenugu, S., et al. 2004. Antimicrobial activity of human Eppin, an androgen-regulated, sperm-bound protein with a whey acidic protein motif. *Biol. Reprod.* 71: 1484-1490.
5. Wang, Z., et al. 2005. Association of Eppin with semenogelin on human spermatozoa. *Biol. Reprod.* 72: 1064-1070.
6. SWISS-PROT/TrEMBL (O95925). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

CHROMOSOMAL LOCATION

Genetic locus: SPINLW1 (human) mapping to 20q13.12.

SOURCE

Eppin (YY-23) is a mouse monoclonal antibody raised against recombinant Eppin of human origin.

PRODUCT

Each vial contains 200 μ l ascites containing IgM with < 0.1% sodium azide.

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

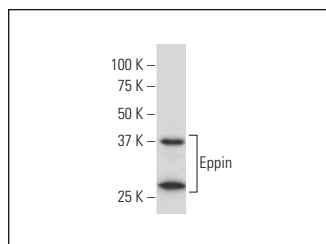
Eppin (YY-23) is recommended for detection of Eppin of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000), immunoprecipitation [1-2 μ l per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution to be determined by researcher, dilution range 1:100-1:5000).

Suitable for use as control antibody for Eppin siRNA (h): sc-44415, Eppin shRNA Plasmid (h): sc-44415-SH and Eppin shRNA (h) Lentiviral Particles: sc-44415-V.

Molecular Weight of Eppin: 16 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

DATA



Eppin (YY-23): sc-100726. Western blot analysis of Eppin expression in NIH/3T3 whole cell lysate.

RESEARCH USE

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