CRISP-2 (M-75): sc-98667



The Power to Question

BACKGROUND

Cysteine-rich secretory proteins (CRISPs) represent a family of evolutionarily conserved proteins which may play a role in the innate immune system and are transcriptionally regulated by androgens in several tissues. CRISP-1 coats the postacrosomal region of sperm heads as they pass through the epididymis. CRISP-1 is found in all regions of the epididymis, ductus deferens, seminal plasma and sperm. CRISP-2, also known as testis-specific protein TPX1 or cancer/testis antigen 36 (CT36), is a 243 amino acid secreted protein. Expressed in the testis and epididymis, CRISP-2 is thought to be involved in calcium fluxes during sperm capacitation by regulating certain ion channels' activity. CRISP-3 is expressed in pancreas and prostate tissues, and along with CRISP-1, is expressed in saliva. The gene that encodes CRISP-3 is an early response gene that may participate in the pathophysiology of the auto-immune lesions of Sjogren's syndrome.

REFERENCES

- Busso, D., Cohen, D.J., Hayashi, M., Kasahara, M. and Cuasnicú, P.S. 2005. Human testicular protein TPX1/CRISP-2: localization in spermatozoa, fate after capacitation and relevance for gamete interaction. Mol. Hum. Reprod. 11: 299-305.
- Du, Y., Huang, X., Li, J., Hu, Y., Zhou, Z. and Sha, J. 2006. Human testisspecific protein 1 expression in human spermatogenesis and involvement in the pathogenesis of male infertility. Fertil. Steril. 85: 1852-1854.
- Gibbs, G.M., Scanlon, M.J., Swarbrick, J., Curtis, S., Gallant, E., Dulhunty, A.F. and O'Bryan, M.K. 2006. The cysteine-rich secretory protein domain of TPX1 is related to ion channel toxins and regulates ryanodine receptor Ca²⁺ signaling. J. Biol. Chem. 281: 4156-4163.
- Hamann, H., Jude, R., Sieme, H., Mertens, U., Töpfer-Petersen, E., Distl, O. and Leeb, T. 2007. A polymorphism within the equine CRISP-3 gene is associated with stallion fertility in Hanoverian warmblood horses. Anim. Genet. 38: 259-264.
- Busso, D., Goldweic, N.M., Hayashi, M., Kasahara, M. and Cuasnicú, P.S. 2007. Evidence for the involvement of testicular protein CRISP-2 in mouse sperm-egg fusion. Biol. Reprod. 76: 701-708.

CHROMOSOMAL LOCATION

Genetic locus: Crisp2 (mouse) mapping to 17 B2.

SOURCE

CRISP-2 (M-75) is a rabbit polyclonal antibody raised against amino acids 24-98 mapping near the N-terminus of CRISP-2 of mouse origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

CRISP-2 (M-75) is recommended for detection of CRISP-2 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 CRISP-2 siRNA (m): sc-77025, CRISP-2 shRNA Plasmid (m): sc-77025-SH and CRISP-2 shRNA (m) Lentiviral Particles: sc-77025-V.

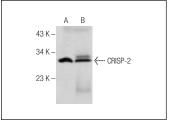
Molecular Weight of CRISP-2: 27 kDa.

Positive Controls: mouse epididymus tissue extract or rat epididymus tissue extract.

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.

DATA



CRISP-2 (M-75): sc-98667. Western blot analysis of CRISP-2 expression in mouse epididymus (**A**) and rat epididymus (**B**) tissue extracts.

RESEARCH USE

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

MONOS Satisfation Guaranteed

Try **CRISP-2 (D-10)**: **sc-390914** or **CRISP-2 (E-12)**: **sc-377391**, our highly recommended monoclonal alternatives to CRISP-2 (M-75).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com