

CRISP-2 (D-10): sc-390914

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 the activity of certain ion channels. 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

1. Online Mendelian Inheritance in Man, OMIM™. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 187430. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Busso, D., et al. 2005. Human testicular protein TPX1/CRISP-2: localization in spermatozoa, fate after capacitation and relevance for gamete interaction. *Mol. Hum. Reprod.* 11: 299-305.
3. Du, Y., et al. 2006. Human testis specific protein 1 expression in human spermatogenesis and involvement in the pathogenesis of male infertility. *Fertil. Steril.* 85: 1852-1854.

CHROMOSOMAL LOCATION

Genetic locus: CRISP2 (human) mapping to 6p12.3; Crisp2 (mouse) mapping to 17 B2.

SOURCE

CRISP-2 (D-10) is a mouse monoclonal antibody raised against amino acids 171-243 mapping at the C-terminus of CRISP-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CRISP-2 (D-10) is available conjugated to agarose (sc-390914 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390914 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390914 PE), fluorescein (sc-390914 FITC), Alexa Fluor® 488 (sc-390914 AF488), Alexa Fluor® 546 (sc-390914 AF546), Alexa Fluor® 594 (sc-390914 AF594) or Alexa Fluor® 647 (sc-390914 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390914 AF680) or Alexa Fluor® 790 (sc-390914 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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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 (D-10) is recommended for detection of CRISP-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 CRISP-2 siRNA (h): sc-77024, CRISP-2 siRNA (m): sc-77025, CRISP-2 shRNA Plasmid (h): sc-77024-SH, CRISP-2 shRNA Plasmid (m): sc-77025-SH, CRISP-2 shRNA (h) Lentiviral Particles: sc-77024-V and CRISP-2 shRNA (m) Lentiviral Particles: sc-77025-V.

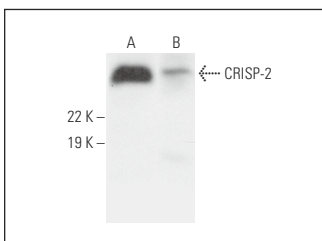
Molecular Weight of CRISP-2: 27 kDa.

Positive Controls: mouse testis extract: sc-2405 or human testis extract: sc-363781.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



CRISP-2 (D-10): sc-390914. Western blot analysis of CRISP-2 expression in human testis (A) and mouse testis (B) tissue extracts.

SELECT PRODUCT CITATIONS

1. Li, Z., et al. 2021. Discovery and validation of novel biomarkers for detection of cervical cancer. *Cancer Med.* 10: 2063-2074.
2. Manfredola, F., et al. 2021. CRISP2, CATSPER1 and PATE1 expression in human asthenozoospermic semen. *Cells* 10: 1956.

RESEARCH USE

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