SANTA CRUZ BIOTECHNOLOGY, INC.

CRISP-3 (D-6): sc-377505

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. AEG is a sperm surface protein involved in the fusion of egg and sperm. Although CRISP-1 (also designated AEG-like protein, ARP, cysteine-rich secretory protein-1 or AEG-related protein) is not the ortholog of rodent AEG, it resembles AEG in that it is an epididymal secretory glycoprotein that binds to the postacrosomal region of the sperm head. 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-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 autoimmune lesions of Sjogren's syndrome.

REFERENCES

1. Krätzschmar, J., et al. 1996. The human cysteine-rich secretory protein (CRISP) family. Primary structure and tissue distribution of CRISP-1, CRISP-2 and CRISP-3. Eur. J. Biochem. 236: 827-836.
2. Liao, Q., et al. 2003. Preferential expression of cystein-rich secretory protein-3 (CRISP-3) in chronic pancreatitis. Histol. Histopathol. 18: 425-433.
3. Udby, L., et al. 2004. Cysteine-rich secretory protein 3 is a ligand of α_{1B}-glycoprotein in human plasma. Biochemistry 43: 12877-12886.

CHROMOSOMAL LOCATION

Genetic locus: CRISP3 (human) mapping to 6p12.3; Crisp3 (mouse) mapping to 17 B2.

SOURCE

CRISP-3 (D-6) is a mouse monoclonal antibody raised against amino acids 21-99 mapping near the N-terminus of CRISP-3 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CRISP-3 (D-6) is available conjugated to agarose (sc-377505 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-377505 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377505 PE), fluorescein (sc-377505 FITC), Alexa Fluor® 488 (sc-377505 AF488), Alexa Fluor® 546 (sc-377505 AF546), Alexa Fluor® 594 (sc-377505 AF594) or Alexa Fluor® 647 (sc-377505 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377505 AF680) or Alexa Fluor® 790 (sc-377505 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

STORAGE

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

APPLICATIONS

CRISP-3 (D-6) is recommended for detection of CRISP-3 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), immunohistochemistry (including paraffin-embedded sections) (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-3 siRNA (h): sc-77026, CRISP-3 siRNA (m): sc-77027, CRISP-3 shRNA Plasmid (h): sc-77026-SH, CRISP-3 shRNA Plasmid (m): sc-77027-SH, CRISP-3 shRNA (h) Lentiviral Particles: sc-77026-V and CRISP-3 shRNA (m) Lentiviral Particles: sc-77027-V.

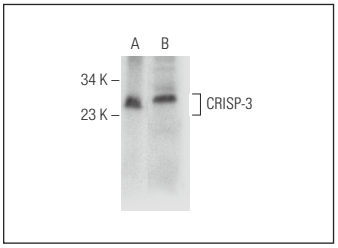
Molecular Weight of CRISP-3 isoforms: 29/31 kDa.

Positive Controls: RIN-m5F whole cell lysate: sc-364792 or mouse embryo extract: sc-364239.

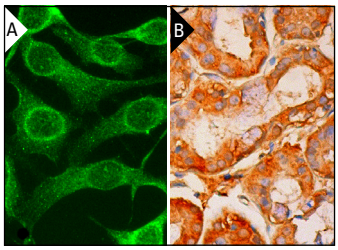
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CRISP-3 (D-6): sc-377505. Western blot analysis of CRISP-3 expression in RIN-m5F whole cell lysate (**A**) and mouse embryo tissue extract (**B**).



CRISP-3 (D-6): sc-377505. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing cytoplasmic staining of glandular cells (**B**).

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.

RESEARCH USE

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