

# CRISP-3 (LV-2A2): sc-101378

## 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

- 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.
- Liao, Q., et al. 2003. Preferential expression of cysteine-rich secretory protein-3 (CRISP-3) in chronic pancreatitis. *Histol. Histopathol.* 18: 425-433.
- Udby, L., et al. 2004. Cysteine-rich secretory protein 3 is a ligand of  $\alpha$ 1B-glycoprotein in human plasma. *Biochemistry* 43: 12877-12886.
- Udby, L., et al. 2005.  $\beta$ -microseminoprotein binds CRISP-3 in human seminal plasma. *Biochem. Biophys. Res. Commun.* 333: 555-561.
- Udby, L., et al. 2005. Characterization and localization of cysteine-rich secretory protein 3 (CRISP-3) in the human male reproductive tract. *J. Androl.* 26: 333-342.
- Bjartell, A., et al. 2006. Immunohistochemical detection of cysteine-rich secretory protein 3 in tissue and in serum from men with cancer or benign enlargement of the prostate gland. *Prostate* 66: 591-603.
- Laine, M., et al. 2007. Low salivary dehydroepiandrosterone and androgen-regulated cysteine-rich secretory protein 3 levels in Sjögren's syndrome. *Arthritis Rheum.* 56: 2575-2584.

## CHROMOSOMAL LOCATION

Genetic locus: CRISP3 (human) mapping to 6p12.3.

## SOURCE

CRISP-3 (LV-2A2) is a mouse monoclonal antibody genetically immunized with cDNA encoding CRISP-3 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CRISP-3 (LV-2A2) is available conjugated to either phycoerythrin (sc-101378 PE) or fluorescein (sc-101378 FITC), 200  $\mu$ g/ml, for IF, IHC(P) and FCM.

## APPLICATIONS

CRISP-3 (LV-2A2) is recommended for detection of CRISP-3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], flow cytometry (1  $\mu$ g per  $1 \times 10^6$  cells) 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 shRNA Plasmid (h): sc-77026-SH and CRISP-3 shRNA (h) Lentiviral Particles: sc-77026-V.

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

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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).

## SELECT PRODUCT CITATIONS

- Ribeiro, F.R., et al. 2011. Cysteine-rich secretory protein-3 (CRISP3) is strongly up-regulated in prostate carcinomas with the TMPRSS2-ERG fusion gene. *PLoS ONE* 6: e22317.

## STORAGE

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

## 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.