

CRISP-1 (M-18): sc-21280

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

- Hayashi, M., et al. 1996. Characterization of a human glycoprotein with a potential role in sperm-egg fusion: cDNA cloning, immunohistochemical localization, and chromosomal assignment of the gene (AEG1). *Genomics* 32: 367-374.
- Schwidetzky, U., et al. 1997. Isolation and characterization of the androgen-dependent mouse cysteine-rich secretory protein-1 (CRISP-1) gene. *Biochem. J.* 321: 325-332.
- Haendler, B., et al. 1997. Differential androgen regulation of the murine genes for cysteine-rich secretory proteins (CRISP). *Eur. J. Biochem.* 250: 440-446.
- Haendler, B., et al. 1999. Expression of transcripts for cysteine-rich secretory proteins (CRISPs) in the murine lacrimal gland. *J. Cell. Physiol.* 178: 371-378.
- Tapinos, N.I., et al. 2002. Characterization of the cysteine-rich secretory protein 3 gene as an early-transcribed gene with a putative role in the pathophysiology of Sjogren's syndrome. *Arthritis Rheum.* 46: 215-222.

CHROMOSOMAL LOCATION

Genetic locus: CRISP1 (human) mapping to 6p12.3; Crisp1 (mouse) mapping to 17 B2.

SOURCE

CRISP-1 (M-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CRISP-1 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-21280 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CRISP-1 (M-18) is recommended for detection of CRISP-1 of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

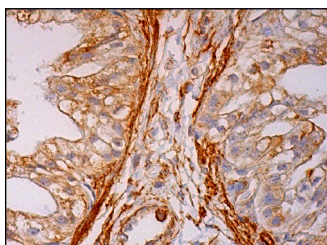
Suitable for use as control antibody for CRISP-1 siRNA (m): sc-44750, CRISP-1 shRNA Plasmid (m): sc-44750-SH and CRISP-1 shRNA (m) Lentiviral Particles: sc-44750-V.

Molecular Weight of CRISP-1: 30 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



CRISP-1 (M-18): sc-21280. Immunoperoxidase staining of formalin fixed, paraffin-embedded human epididymis tissue showing membrane and cytoplasmic staining of glandular cells.

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 or our catalog for detailed protocols and support products.