SANTA CRUZ BIOTECHNOLOGY, INC.

CRISP-11 (N-15): sc-160253



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 proteins are highly expressed in the mammalian reproductive tract and in the venom secretory ducts of some reptiles. CRISP-11 (cysteine-rich secretory protein 11), also known as cysteine-rich secretory protein LCCL domain-containing 2 (CRISPLD2 or LCRISP2), is a 497 amino acid protein containing 2 LCCL domains, which are thought to function as autonomous folding domains used to construct modular proteins through exon shuffling. Serum concentrations of CRISP-11 have been shown to be an indicator of a patient's exposure to LPS, immunostimulatory component of Gram-negative bacteria, and one's sensitivity to it.

REFERENCES

- 1. Trexler, M., Bányai, L. and Patthy, L. 2000. The LCCL module. Eur. J. Biochem. 267: 5751-5757.
- Chiquet, B.T., Lidral, A.C., Stal, S., Mulliken, J.B., Moreno, L.M., Arcos-Burgos, M., Arco-Burgos, M., Valencia-Ramirez, C., Blanton, S.H. and Hecht, J.T. 2007. CRISPLD2: a novel NSCLP candidate gene. Hum. Mol. Genet. 16: 2241-2248.
- Gibbs, G.M. and O'Bryan, M.K. 2007. Cysteine rich secretory proteins in reproduction and venom. Soc. Reprod. Fertil. Suppl. 65: 261-267.
- Vadnais, M.L., Foster, D.N. and Roberts, K.P. 2008. Molecular cloning and expression of the CRISP family of proteins in the boar. Biol. Reprod. 79: 1129-1134.
- Reddy, T., Gibbs, G.M., Merriner, D.J., Kerr, J.B. and O'Bryan, M.K. 2008. Cysteine-rich secretory proteins are not exclusively expressed in the male reproductive tract. Dev. Dyn. 237: 3313-3323.
- Gibbs, G.M., Roelants, K. and O'Bryan, M.K. 2008. The CAP superfamily: cysteine-rich secretory proteins, antigen 5, and pathogenesis-related 1 proteins—roles in reproduction, cancer, and immune defense. Endocr. Rev. 29: 865-897.
- Cohen, D.J., Busso, D., Da Ros, V., Ellerman, D.A., Maldera, J.A., Goldweic, N. and Cuasnicu, P.S. 2008. Participation of cysteine-rich secretory proteins (CRISP) in mammalian sperm-egg interaction. Int. J. Dev. Biol. 52: 737-742.
- Ramazanova, A.S., Starkov, V.G., Osipov, A.V., Ziganshin, R.H., Filkin, S.Y., Tsetlin, V.I. and Utkin, Y.N. 2008. Cysteine-rich venom proteins from the snakes of Viperinae subfamily-molecular cloning and phylogenetic relationship. Toxicon. 53: 162-168.
- Wang, Z.Q., Xing, W.M., Fan, H.H., Wang, K.S., Zhang, H.K., Wang, Q.W., Qi, J., Yang, H.M., Yang, J., Ren, Y.N., Cui, S.J., Zhang, X., Liu, F., Lin, D.H., Wang, W.H., Hoffmann, M.K. and Han, Z.G. 2009. The novel lipopolysaccharide-binding protein CRISPLD2 is a critical serum protein to regulate endotoxin function. J. Immunol. 183: 6646-6656.

RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: CRISPLD2 (human) mapping to 16q23.3; Crispld2 (mouse) mapping to 8 E1.

SOURCE

CRISP-11 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CRISP-11 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-160253 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CRISP-11 (N-15) is recommended for detection of CRISP-11 of human origin, LCRISP2 of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluo-rescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other CRISP family members.

Suitable for use as control antibody for CRISP-11 siRNA (h): sc-93543, LCRISP2 siRNA (m): sc-146687, CRISP-11 shRNA Plasmid (h): sc-93543-SH, LCRISP2 shRNA Plasmid (m): sc-146687-SH, CRISP-11 shRNA (h) Lentiviral Particles: sc-93543-V and LCRISP2 shRNA (m) Lentiviral Particles: sc-146687-V.

Molecular Weight of CRISP-11: 56 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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) Immunofluo-rescence: 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.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.