## SANTA CRUZ BIOTECHNOLOGY, INC.

# CC10 (S-20): sc-9773



## BACKGROUND

Clara cell 10 (CC10) protein, a homologue of rabbit uteroglobin, is a phospholipase A2 inhibitor. CC10 is regulated by AP-1, octamer, and hepatocyte nuclear factor-3 (HNF-3) family transcription factors. CC10 expression changes in relation to the ovarian menstrual cycle, and expression in human endometrium may be stimulated by progesterone, suggesting that CC10 may regulate eicosanoid levels in the human uterus. CC10 is expressed in the lung in nonciliated airway epithelial cells and in urogenital secretions. CC10 is involved in modulating inflammation in airway passages and may play a role in asthma. Overexpression of CC10 in the non-small cell lung cancer cell line A549 was shown to result in the near absence of MMP-2 and MMP-9 matrix metalloproteinases and a reduction in invasiveness, indicating that loss of CC10 may contribute to carcinogenesis.

## CHROMOSOMAL LOCATION

Genetic locus: SCGB1A1 (human) mapping to 11q12.3; Scgb1a1 (mouse) mapping to 19 A.

#### SOURCE

CC10 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CC10 of mouse origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9773 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 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.

## **APPLICATIONS**

CC10 (S-20) is recommended for detection of CC10 of mouse, rat and 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)], 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 CC10 siRNA (h): sc-29954, CC10 siRNA (m): sc-29955, CC10 shRNA Plasmid (h): sc-29954-SH, CC10 shRNA Plasmid (m): sc-29955-SH, CC10 shRNA (h) Lentiviral Particles: sc-29954-V and CC10 shRNA (m) Lentiviral Particles: sc-29955-V.

Molecular Weight of CC10: 10 kDa.

Positive Controls: rat lung extract: sc-2396 or WI-38 whole cell lysate: sc-364260.

#### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

#### DATA





CC10 (S-20): sc-9773. Western blot analysis of human recombinant CC10 fusion protein.

CC10 (S-20): sc-9773. Immunofluorescence staining of methanol-fixed A549 cells showing cytoplasmic localization.

#### SELECT PRODUCT CITATIONS

- 1. Gonzalez, R.F., et al. 2009. Rat alveolar type I cells proliferate, express OCT-4, and exhibit phenotypic plasticity *in vitro*. Am. J. Physiol. Lung Cell. Mol. Physiol. 297: L1045-L1055.
- Yoshimi, T., et al. 2010. Suppression of embryonic lung branching morphogenesis by antisense oligonucleotides against HOM/C homeobox factors. *In Vitro* Cell. Dev. Biol. Anim. 46: 664-672.
- Tropea, K.A., et al. 2012. Bronchioalveolar stem cells increase after mesenchymal stromal cell treatment in a mouse model of bronchopulmonary dysplasia. Am. J. Physiol. Lung Cell. Mol. Physiol. 302: L829-L837.
- 4. Banerjee, E.R., et al. 2012. Human embryonic stem cells differentiated to lung lineage-specific cells ameliorate pulmonary fibrosis in a xenograft transplant mouse model. PLoS ONE 7: e33165.

### PROTOCOLS

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

MONOS Satisfation Guaranteed Try CC10 (E-11): sc-365992 or CC10 (B-6): sc-390313, our highly recommended monoclonal alternatives to CC10 (S-20). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see CC10 (E-11): sc-365992.