SANTA CRUZ BIOTECHNOLOGY, INC.

# CC10 (H-75): sc-25554

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*The Power to Question*

## BACKGROUND

Clara cell 10 (CC10) protein, a homologue of rabbit uteroglobin, is a phospholipase $A_2$ 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 nonciliated airway epithelial cells in the lung 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.

## REFERENCES


1. Hagen, G., et al. 1990. Tissue-specific expression, hormonal regulation and 5'-flanking gene region of the rat Clara cell 10 kDa protein: comparison to rabbit uteroglobin. Nucleic Acids Res. 18: 2939-2946.
2. Singh, G., et al. 1990. Clara cell 10 kDa protein (CC10): comparison of structure and function to uteroglobin. Biochim. Biophys. Acta 1039: 348-355.
3. Bernard, A., et al. 1992. Human urinary protein 1: evidence for identity with the Clara cell protein and occurrence in respiratory tract and urogenital secretions. Clin. Chim. Acta 207: 239-249.


## CHROMOSOMAL LOCATION

Genetic locus: SCGB1A1 (human) mapping to 11q12.3.

## SOURCE

CC10 (H-75) is a rabbit polyclonal antibody raised against amino acids 17-91 of CC10 of human origin.

## PRODUCT

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

## APPLICATIONS

CC10 (H-75) is recommended for detection of CC10 of human origin by Western Blotting (starting dilution 1:200, 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 CC10 siRNA (h): sc-29954, CC10 shRNA Plasmid (h): sc-29954-SH and CC10 shRNA (h) Lentiviral Particles: sc-29954-V.

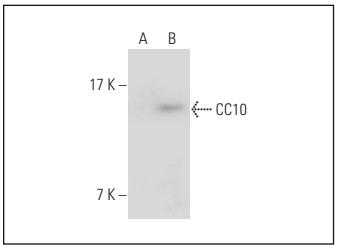
Molecular Weight of CC10: 10 kDa.

Positive Controls: CC10 (h2): 293T Lysate: sc-174172 or WI-38 whole cell lysate: sc-364260.

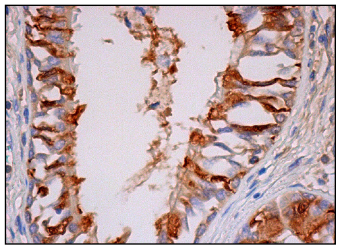
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA




CC10 (H-75): sc-25554. Western blot analysis of CC10 expression in non-transfected: sc-117752 (**A**) and human CC10 transfected: sc-174172 (**B**) 293T whole cell lysates.



CC10 (H-75): sc-25554. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bronchus tissue showing cytoplasmic staining of respiratory epithelial cells.

## SELECT PRODUCT CITATIONS


1. Wan, H., et al. 2007. Amino acid 226 in the hemagglutinin of H9N2 influenza viruses determines cell tropism and replication in human airway epithelial cells. J. Virol. 81: 5181-5191.
2. Delgado, O., et al. 2011. Multipotent capacity of immortalized human bronchial epithelial cells. PLoS ONE 6: e22023.


## 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.