SANTA CRUZ BIOTECHNOLOGY, INC.

CC10 (C-20): sc-9770

SANTA CRUZ BIOTECHNOLOGY
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 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus 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.

Blocking peptide available for competition studies, sc-9770 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CC10 (C-20) 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).

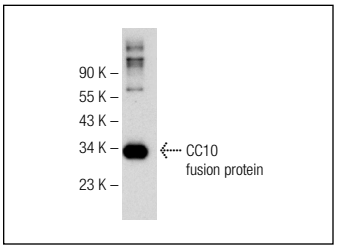
Suitable for use as control antibody for CC10 siRNA (h): sc-29954, CC10 shRNA Plasmid (h): sc-29954-SH and CC10 shRNA (h) Lentiviral Particles: sc-29954-V.

Molecular Weight of CC10: 10 kDa.

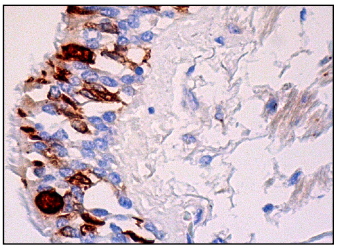
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



CC10 (C-20): sc-9770. Western blot analysis of human recombinant CC10 fusion protein.



CC10 (C-20): sc-9770. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bronchus tissue showing cytoplasmic staining of respiratory epithelial cells.

SELECT PRODUCT CITATIONS

1. Maeshima, A., et al. 2002. Mixed mucinous-type and non-mucinous-type adenocarcinoma of the lung: immunohistochemical examination and K-Ras gene mutation. Virchows Arch. 440: 598-603.
2. Zhou, J.X., et al. 2004. Enrichment and identification of human 'fetal' epidermal stem cells. Hum. Reprod. 19: 968-974.
3. Coraux, C., et al. 2005. Embryonic stem cells generate airway epithelial tissue. Am. J. Respir. Cell Mol. Biol. 32: 87-92.

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.