

SARS NC (Ncap11): sc-52906

BACKGROUND

Severe acute respiratory syndrome (SARS) coronavirus, a recently emergent infectious agent, shares little homology with previously known coronaviruses with respect to its genes and encoding proteins. Following this pattern, SARS nucleocapsid protein (SARS NC) only weakly resembles analogous proteins of the coronavirus family, and thus estimations of its function prove difficult. In fact, the region encoding SARS NC and other matrix and nucleocapsid proteins more closely resembles avian coronaviruses, while phylogenetic analyses indicate a mammalian origin for the replicase protein. SARS NC expression increases the binding of transcription factors to promotor sequences of c-Fos, ATF2, CREB-1 and FosB, all components of the AP-1 signaling pathway. Other signaling pathways, e.g. the NFκB pathway, are not affected, however, implying that pathway activation by SARS NC is selective, and thus possibly an important target in SARS functional studies.

REFERENCES

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4. Stavrinides, J., et al. 2004. Mosaic evolution of the severe acute respiratory syndrome coronavirus. *J. Virol.* 78: 76-82.
5. Qiu, M., et al. 2005. Use of the COOH portion of the nucleocapsid protein in an antigen-capturing enzyme-linked immunosorbent assay for specific and sensitive detection of severe acute respiratory syndrome coronavirus. *Clin. Diagn. Lab. Immunol.* 12: 474-6.
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SOURCE

SARS NC (Ncap11) is a mouse monoclonal antibody raised against full-length recombinant SARS NC.

PRODUCT

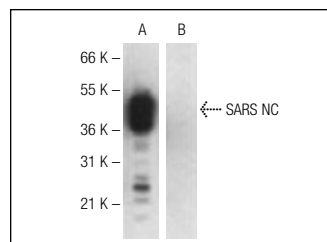
Each vial contains IgG_{2b} in 100 µl of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SARS NC (Ncap11) is recommended for detection of SARS NC of viral origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000), immunoprecipitation [1-2 µl per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution to be determined by researcher, dilution range 1:50-1:2500).

Molecular Weight of SARS NC: 46 kDa.

DATA



SARS NC (Ncap11): sc-52906. Western blot analysis of SARS NC expression in SARS NC transfected (A) and non-transfected (B) mouse melanoma cell lysates.

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 for detailed protocols and support products.