

Influenza A ns2 (vK-16): sc-17598

BACKGROUND

Influenza viruses are divided into three types, designated A, B and C. Influenza types A and B are responsible for epidemics of respiratory illness that occur almost every winter and are often associated with increased rates of hospitalization and death. Influenza type A viruses are divided into subtypes based on differences in two viral proteins called hemagglutinin (H) and neuraminidase (N). The interaction of the influenza A virus NS1 protein (a type I IFN antagonist) with host-cell factors plays a significant role in viral pathogenesis. NS2 is a nonstructural protein that localizes to the nucleus and the cytoplasm. It affects cellular RNA transport, splicing, and translation, and is essential for nuclear export of influenza virus ribonucleoprotein (RNP) complexes.

REFERENCES

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2. Wang, X., Li, M., Zheng, H., Muster, T., Palese, P., Beg, A.A. and Garcia-Sastre, A. 2000. Influenza A virus ns1 protein prevents activation of NF κ B and induction of α/β interferon. *J. Virol.* 24: 11566-11573.
3. Neumann, G., Hughes, M.T. and Kawaoka, Y. 2000. Influenza A virus ns2 protein mediates vRNP nuclear export through NES-independent interaction with hCRM1. *EMBO J.* 19: 6751-6758.
4. Basler, C.F., Reid, A.H., Dybing, J.K., Janczewski, T.A., Fanning, T.G., Zheng, H., Salvatore, M., Perdue, M.L., Swayne, D.E., Garcia-Sastre, A., Palese, P. and Taubenberger, J.K. 2001. Sequence of the 1918 pandemic influenza virus nonstructural gene (NS) segment and characterization of recombinant viruses bearing the 1918 NS genes. *Proc. Natl. Acad. Sci. USA* 5: 2746-2751.
5. Fleming, D.M. and Zambon, M. 2001. Update on influenza and other viral pneumonias. *Curr. Opin. Infect. Dis.* 2: 199-204.

SOURCE

Influenza A ns2 (vK-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ns2 of Influenza A virus origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-17598 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Influenza A ns2 (vK-16) is recommended for detection of ns2 of Influenza A virus origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

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.

SELECT PRODUCT CITATIONS

1. Gao, S., et al. 2015. Interaction of NS2 with AIMP2 facilitates the switch from ubiquitination to SUMOylation of M1 in influenza A virus-infected cells. *J. Virol.* 89: 300-311.

PROTOCOLS

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