



# Respiratory Syncytial Virus (2F7): sc-101362

## BACKGROUND

Respiratory Syncytial Virus (RSV) is a major cause of respiratory illness in children who have not received the vaccine or treatment. Respiratory Syncytial Virus is a negative sense, enveloped, RNA virus. The virion has an average diameter between 120 and 300 nm. The fusion protein of the RSV 2 strain (subtype A) directs fusion of viral and cellular membranes, results in viral penetration and can form syncytia or multi-nucleated giant cells. The matrix protein plays a role in viral assembly and has been observed to traffic into and out of the nucleus at specific times during the respiratory infectious cycle. The matrix protein has also been shown to be able to inhibit transcription, which may be a key to respiratory pathogenesis.

## REFERENCES

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4. Brock, S.C., et al. 2005. The transmembrane domain of the Respiratory Syncytial Virus F protein is an orientation-independent apical plasma membrane sorting sequence. *J. Virol.* 79: 12528-12535.
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7. Cilla, G., et al. 2006. Risk factors for hospitalization due to Respiratory Syncytial Virus infection among infants in the Basque Country, Spain. *Epidemiol. Infect.* 134: 506-513.
8. Ghildyal, R., et al. 2006. Central role of the Respiratory Syncytial Virus matrix protein in infection. *FEMS Microbiol. Rev.* 30: 692-705.

## SOURCE

Respiratory Syncytial Virus (2F7) is a mouse monoclonal antibody raised against recombinant Respiratory Syncytial Virus.

## PRODUCT

Each vial contains 50 µg IgG<sub>1</sub> in 500 µl PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

Respiratory Syncytial Virus (2F7) is recommended for detection of fusion proteins F<sub>0</sub> and F<sub>1</sub> of Respiratory Syncytial Virus origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000), immunofluorescence (starting dilution to be determined by researcher, dilution range 1:50-1:2500) and solid phase ELISA (starting dilution to be determined by researcher, dilution range 1:100-1:5000).

Molecular Weight of Respiratory Syncytial Virus F<sub>0</sub>: 70 kDa.

Molecular Weight of Respiratory Syncytial Virus F<sub>1</sub>: 50 kDa.

## SELECT PRODUCT CITATIONS

1. Guo, X., et al. 2015. Respiratory Syncytial Virus infection upregulates NLRC5 and major histocompatibility complex class I expression through RIG-I induction in airway epithelial cells. *J. Virol.* 89: 7636-7645.
2. Shi, H., et al. 2016. Baicalin from *Scutellaria baicalensis* blocks Respiratory Syncytial Virus (RSV) infection and reduces inflammatory cell infiltration and lung injury in mice. *Sci. Rep.* 6: 35851.
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4. Zhang, K., et al. 2019. Establishment of a lethal aged mouse model of human Respiratory Syncytial Virus infection. *Antiviral Res.* 161: 125-133.
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## RESEARCH USE

For research use only, not for use in diagnostic procedures.