

# Influenza B M1 (5K167): sc-71379

## BACKGROUND

The Influenza viruses, designated Influenza A, Influenza B and Influenza C, are a group of RNA viruses that belong to the *Orthomyxoviridae* family and are constantly changing through antigenic drifts and shifts, allowing the viruses to evade the immune system of the host. The viruses transcribe and replicate their genomes in the nuclei of infected cells and rely on the nucleocytoplasmic transport of viral ribonucleoproteins (vRNPs) during their replication process. Influenza B contains several viral proteins, namely Influenza B NP (nucleoprotein), Influenza B HA (hemagglutinin), Influenza B M1 (matrix protein) and Influenza B NA (neuraminidase), all of which are necessary for proper viral function, such as viral DNA replication, transcription, RNA processing and protein synthesis. Influenza A causes pandemics, while Influenza B usually causes minor illnesses (such as the common flu) and Influenza C can lead to mild or asymptomatic disease.

## REFERENCES

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3. Read, R.C., Goodwin, L., Parsons, M.A., Silcocks, P., Kaczmarek, E.B., Parker, A. and Baldwin, T.J. 1999. Coinfection with Influenza B Virus does not affect association of *Neisseria meningitidis* with human nasopharyngeal mucosa in organ culture. *Infect. Immun.* 67: 3082-3086.
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5. Paragas, J., Talon, J., O'Neill, R.E., Anderson, D.K., García-Sastre, A. and Palese, P. 2001. Influenza B and C Virus NEP (NS2) proteins possess nuclear export activities. *J. Virol.* 75: 7375-7383.
6. Peltola, V., Ziegler, T. and Ruuskanen, O. 2003. Influenza A and B Virus infections in children. *Clin. Infect. Dis.* 36: 299-305.
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8. Chi, X.S., Hu, A., Bolar, T.V., Al-Rimawi, W., Zhao, P., Tam, J.S., Rappaport, R. and Cheng, S.M. 2005. Detection and characterization of new Influenza B Virus variants in 2002. *J. Clin. Microbiol.* 43: 2345-2349.

## SOURCE

Influenza B M1 (5K167) is a mouse monoclonal antibody raised against recombinant Influenza B Virus matrix protein M1.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Influenza B M1 (5K167) is recommended for detection of matrix protein (M1) of Influenza B Virus origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Influenza B M1 matrix protein: 27 kDa.

## SELECT PRODUCT CITATIONS

1. Jang, Y., Lee, H.W., Shin, J.S., Go, Y.Y., Kim, C., Shin, D., Malpani, Y., Han, S.B., Jung, Y.S. and Kim, M. 2016. Antiviral activity of KR-23502 targeting nuclear export of Influenza B Virus ribonucleoproteins. *Antiviral Res.* 134: 77-88.

## 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](http://www.scbt.com) for detailed protocols and support products.