

Sigma-Virocult® - The Challenge of H3N2v



The current concern in North America regarding increased numbers of cases of H3N2v variant seasonal influenza A virus (with the influenza A (H1N1)pdm09 M gene) is a reminder of the need for constant vigilance against this cunning pathogen with its ability to alter without warning, and with renewed potential for serious outbreaks.

A new report from the United States Centers for Disease Control and Prevention ¹ shows that in an evaluation of seven widely used FDA-cleared rapid influenza diagnostic tests against a panel of seven H3N2v strains, only four of the tests detected all of the strains. One of the rapid tests detected only one of the seven strains.

In the present situation with an emerging potentially virulent strain, it is essential to accurately identify all occurrences. The CDC report and others ²⁻⁵ have shown that the sensitivity of rapid influenza diagnostic tests can be low compared with virus isolation or RT-PCR. So where possible, all specimens where H3N2v is suspected should be confirmed by culture or RT-PCR.

For all of these techniques, a reliable transport device is essential, one which preserves the integrity and infectivity of virus and genome. In these circumstances the most trusted device is [Sigma-Virocult®](#). In a study ⁶ presented at the 2010 Clinical Virology Symposium, Sigma-Virocult® was shown to maintain the viability of seasonal influenza A H3N2 for at least 14 days. The integrity of the virus genome, as demonstrated by RT-PCR was also maintained for at least 14 days.

[Sigma-Virocult®](#) from Medical Wire is the ideal device for H3N2 including variant strains. Each pack comes with one or two Sigma-swabs® with an open-celled polyurethane foam bud that allows complete flow through of virus and reagents for optimum sensitivity of any techniques used. The screw top transport vial contains Virocult® medium, for long known as one of the most dependable virus transport media available. The two swab format can be used for multi-site testing, such as nose and throat. Mini-tip versions of the swabs are also available for nasopharyngeal sampling.

[Sigma-Virocult®](#) is readily available around the world. Please contact us for details of your nearest distributor.

References

1. Centers for Disease Control and Prevention, Evaluation of Rapid Influenza Diagnostic Tests for Influenza A (H3N2)v Virus and Updated Case Count - United States, 2012, *Morbidity and Mortality Weekly Report* Early Release / Vol. 61 August 10, 2012
2. Hurt AC, Alexander R, Hibbert J, Deed N, Barr IG. Performance of six influenza rapid tests in detecting human influenza in clinical specimens. *J Clin Virol* 2007;39:132-5.
3. Faix DJ, Sherman SS, Waterman SH. Rapid-test sensitivity for novel swine-origin influenza A (H1N1) virus in humans. *N Engl J Med* 2009;361:728-9.
4. Ginocchio CC, Zhang F, Manji R, et al. Evaluation of multiple test methods for the detection of the novel 2009 influenza A (H1N1) during the New York City outbreak. *J Clin Virol* 2009;45:191-5.
5. Uyeki TM, Prasad R, Vukotich C, et al. Low sensitivity of rapid diagnostic test for influenza. *Clin Infect Dis* 2009;48:e89-92.
6. Valette, M., Bouscambert-Duchamp, M., Fanget, R., Lambert, S., & Lina, B., Comparison Of Virocult® Swab, S-Swab® And S-Virocult® For Influenza A Viability For Cell Culture And Molecular Detection, *Poster S84, Clinical Virology Symposium 2010*, Daytona Beach. Click [here](#) for further

information.

7. Information on Influenza A (H3N2) Variant Viruses (“H3N2v”)
www.cdc.gov/flu/swineflu/influenza-variant-viruses-h3n2v.htm

8. And also at www.who.int/influenza/gisrs_laboratory/terminology_ah3n2v/en/index.html

9. Variant (Swine Origin) Influenza Viruses in Humans
www.cdc.gov/flu/swineflu/variant.htm

Order Details

Product Code	Product name	Configuration
MW951S	Sigma-Virocult®	1 standard Sigma-swab® with breakpoint
MW951SENT	Sigma-Virocult®	1 mini-tip Sigma-swab® with breakpoint
MW951S2*	Sigma-Virocult®	2 standard Sigma-swabs® with breakpoint

*Other variants are available. Please check website.

In the United States Sigma-Virocult is available through Fisher Scientific: www.fishersci.com

Further details from www.mwe.co.uk.

