

World-class Pioneers

Medix Biochemica specializes in monoclonal antibodies and diagnostic tests for numerous medical conditions. We have succeeded in combining the scientific community and high-tech diagnostics. More than twenty years ago, we were one of the first companies in the world to produce monoclonal antibodies. We immediately understood their enormous potential in healthcare. Today we are a dynamic high-tech corporation with a global customer base.



As a result of our respected global reputation, more than 150 companies in over 30 countries use MedixMAB monoclonal antibodies and numerous laboratories and physicians rely on our Actim diagnostic healthcare tests. High quality has always been the cornerstone of all our operations. Our entire company is certified as being in conformity with ISO 9001:2000. In addition, operations related to diagnostic test kits including controls and reagents are ISO 13485:2003 certified. We also value research and development. A substantial part of our turnover is still devoted to R&D. Our expertise covers the whole production chain from raw materials (monoclonal antibodies) to finished products, such as the Actim diagnostic tests.



actim™
Reliable test results in minutes



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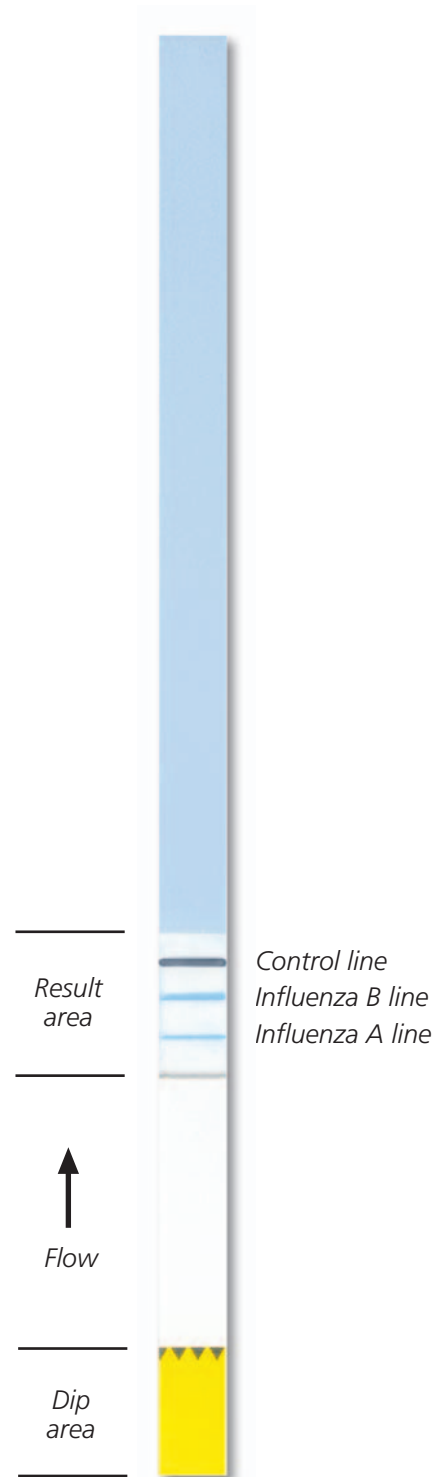


actim™
INFLUENZA
A&B



actim™

INFLUENZA A&B



Rapid detection of influenza type A and B virus antigens

The rapid diagnosis of influenza is essential for managing the disease effectively. The easy-to-use Actim Influenza A&B dipstick test differentiates between influenza type A and B virus antigens in respiratory samples in just 10 minutes.

Influenza is an acute, highly contagious viral infection of the respiratory tract. It is easily spread by aerosol droplets. Influenza can cause severe complications in children, the elderly, and in people with chronic diseases. Common complications are bronchitis and secondary bacterial pneumonia.

Influenza viruses are classified as types A, B and C. Influenza A is divided into subtypes according to differences in surface proteins (hemagglutinin, neuraminidase). An "antigen shift" causes a new subtype. Influenza viruses cause seasonal epidemics of global importance. Influenza A causes the most serious epidemics, while influenza B generally causes milder symptoms. Influenza A and B can co-circulate, but usually one of them is predominant. Influenza C usually causes a locally spread, mild disease.

Early detection and diagnosis

Early diagnosis after the onset of symptoms allows for antiviral treatment. This therapy may reduce the severity and duration of the illness if started within the first 48 hours.

With the Actim Influenza A&B test, the influenza virus can be diagnosed quickly and reliably on the spot. The test result helps you to prescribe the correct antiviral treatment and to reduce the unnecessary use of antibiotics.

Testing hospitalized patients for influenza type A and B prevents the nosocomial transmission of the infection to patients at high risk of influenza-related complications. Thus it can contribute to reduction in the cost and length of hospital stay.

Actim Influenza A&B test

The Actim Influenza A&B is a rapid qualitative *in vitro* assay that detects and differentiates between influenza type A and B infections in respiratory specimens. With the simple dipstick test, you can diagnose and differentiate influenza A or B types in just 15-20 minutes including sample collection.

Evaluation of Actim Influenza A&B test

Stuchbery et al. 2005
Influenza A

Reference method	Sensitivity	Specificity	PPV	NPV
EIA	95 % (18/19)	>99 % (379/382)	86 % (18/21)	>99 % (379/380)
Culture	87 % (13/15)	>99 % (278/281)	81 % (13/16)	>99 % (278/280)

401 samples of which 221 NPA or nasal swabs. Other sample types contained e.g. sputum, BAL and throat swabs. Samples transported in 2ml of VTM. Other diagnoses: Adenovirus, HSV, parainfluenzae, RSV and rhinovirus. They all gave a negative result with the Actim Influenza A&B test. There were not enough Influenza B cases to make statistically relevant analysis.

The principle of the Actim Influenza A&B test is immunochromatography. Monoclonal antibodies against influenza A and B viral nucleoproteins are used in lateral flow test strips. Nucleoproteins are type specific and highly conserved. The test detects various Influenza A subtypes, including the avian subtypes H5N3, H7N3, H9N2, and H5N1.

You can use various respiratory specimens, such as nasal aspirates, nasal washes or swabs. If the sample contains influenza viruses, the influenza type A or B virus nucleoprotein binds to the corresponding antibody in the dipstick, which gives a positive test result.

Easy dipstick procedure

The Actim Influenza A&B test kit contains everything you need for swab sample collection and testing. You can diagnose both influenza types simultaneously, and you only need to process the sample once before testing. The convenient dipstick format makes the test suitable for viscous, poorly absorbable samples. It is also suited for samples collected into a viral transport medium (VTM), which allows them to be transported and processed further if necessary.

Reliable results in 10 minutes

The evaluations have demonstrated that the sensitivity and specificity of the Actim Influenza A&B test is high when tested against different reference methods, such as EIA, culture, and TR-FIA. Cross-reactions to various bacteria or other viruses than influenza have not been observed. The Actim Influenza A&B dipstick gives a reliable result in 10 minutes (the detection step). The quick diagnosis makes fast, accurate treatment possible.

Evaluation of Actim Influenza A&B test

University of Turku, Department of Virology 2004
Influenza A Influenza B

TR-FIA	Positive	Negative	Σ	Positive	Negative	Σ
Positive	18	3	21	19	2	21
Negative	0	68	68	0	68	68
Σ	18	71	89	19	70	89

Sensitivity	86%	PPV	100%	90%	PPV	100%
Specificity	100%	NPV	95%	100%	NPV	97%

Nasal aspirate samples were analyzed with the Actim Influenza A&B test using TR-FIA as the reference method. Other diagnoses: Adenovirus, parainfluenzae, and RSV. They all gave a negative result with the Actim Influenza A&B test.

References

Cox N.J. and Subbarao K. Influenza. Lancet (1999) 354:1277-82.

Heikkinen T. et al. Comparative study of nasopharyngeal aspirate and nasal swab specimens for detection of influenza. BMJ (2001) 322:138.

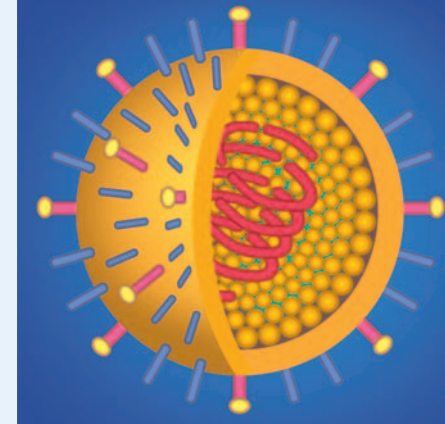
Sintchenko V. et al. Treat or test first? Decision analysis of empirical antiviral treatment of influenza virus infection versus treatment based on rapid test results. Journal of Clinical Virology (2002) 25:15-21.

Stuchbery A. et al. Evaluation of a one-step rapid immunochromatographic test for influenza A and B viruses. Australian Society for Microbiology National Conference in Canberra, Australia (25-29 September, 2005), Poster.

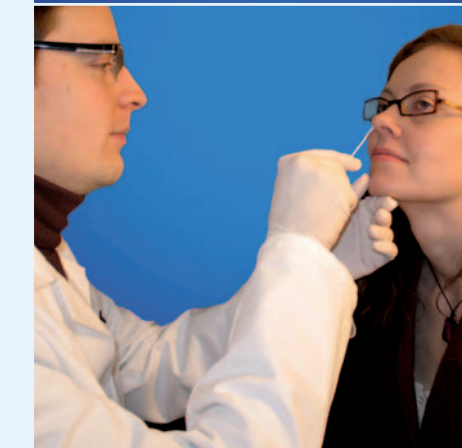
Walls, H. et al. Time-resolved fluoroimmunoassay with monoclonal antibodies for rapid diagnosis of influenza infections. J.Clin.Microbiol. (1986) 24:907-912.

Ordering information

Product Description	REF number
Actim Influenza A&B 20 test kit	32832ETAC



The Actim Influenza A&B test detects Influenza A and B nucleoproteins. The test has been shown to detect various influenza A subtypes including the avian subtypes H5N3, H7N3, H9N2 and H5N1.



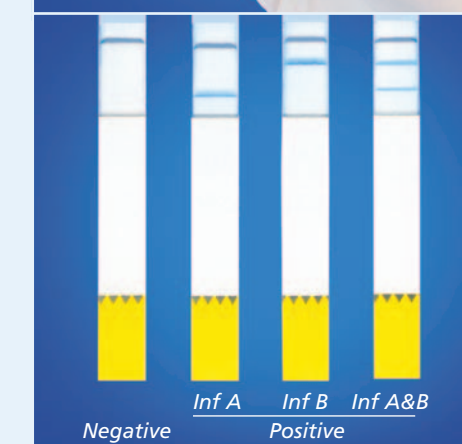
Take a nasal swab sample, or alternatively use a nasal aspirate.



Add the extraction buffer directly in liquid samples. For swab samples, drop saline into the test tube followed by the extraction buffer. Insert the swab and mix. Leave the samples to extract for 5 minutes.



All you need to do is dip the Actim Influenza A&B dipstick in the sample until the liquid front rises to the result window. Then remove the dipstick from the tube and let it develop in a horizontal position for 10 minutes.



A blue line in the lower half of the result area indicates a positive result for influenza type A, while a blue line in the upper half indicates type B. When only the black control line is visible, the result is negative.