

SARS-CoV-2/FluA/FluB+ADV/RSV Antigen Combo Rapid Test Kit (LFIA)

Self-testing

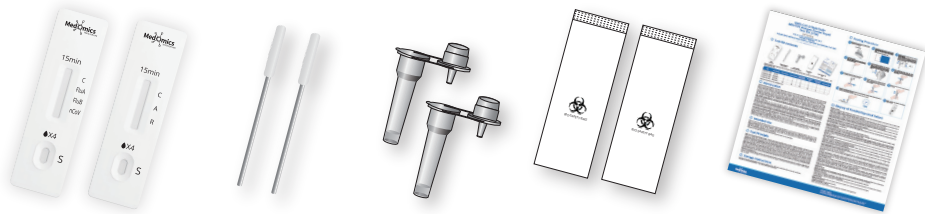
FOR *IN VITRO* DIAGNOSTIC USE ONLY.
FOR SELF-TESTING.

PLEASE READ INSTRUCTIONS CAREFULLY BEFORE YOU PERFORM THE TEST.



Scan to watch the
operation video of this
test kit

Test Kit contents



Test kit contains test cassettes, sterile anterior nasal swabs, sampling tubes containing individual lysis buffer, droppers, and instructions for use.

REF	Specification	Test Cassette	Sterile swabs	Lysis Buffer and Dropper	Bio-Safety Bag	Instructions For Use	Test-tube Rack
123111-01-102	1pc/box	2	2	2	2	1	/
123111-02-102	2pcs/box	4	4	4	4	1	/
123111-05-102	5pcs/box	10	10	10	10	1	/
123111-20-102	20pcs/box	40	40	40	40	4	1

Materials required but not included: timer.

Testing Procedure

Note: 1. Materials required but not included: timer.

2. Those ≥ 18 years old may perform the test on their own, while children aged 5-17 years old need to be sampled and tested with the assistance of an adult.

3. Use the SARS-CoV-2/FluA/FluB buffer only with the SARS-CoV-2/FluA/FluB test cassette, and the ADV/RSV buffer only with the ADV/RSV test cassette.

• For SARS-CoV-2&Flu A/B Test

1 Bring the kit to room temperature before testing. Wash your hands and dry.

2 Check the expiry date on the box or foil bag. Check that the Test kit contents have not been previously used (these disposable materials cannot be used twice). Do not open pouch until ready to use.

3 Tear the seal of the sampling tube and put it into the test-tube rack. **Note:** For specification of 1pc/box, 2 pcs/box, 5pcs/box and 20 pcs/box, the package box can be used as test-tube rack by pushing the dotted holes on the box. For 20 pcs/box, please use the provided test-tube rack in the box.

4 Collecting the sample: Open the package containing the sterile swab. Avoid touching the cotton tip and remove the swab using the plastic handle.

5 Insert the swab into a nostril (2.5 cm). Be sure to collect any nasal drainage that may be present. Carefully rotate the swab in a circular path against the inside of the nostril at least 5 times. Using the same swab repeat the procedure in the other nostril.

6 After collecting the sample, insert the swab's cotton tip into sampling tubes containing individual lysis buffer, rotate the swab against the inner tube wall 10 times.

7 Squeeze the swab from the outer tube wall 5 times to completely dissolve the sample in the buffer.

8 Move the swab up until it is resting on the sample solution, squeeze the swab from the outer tube wall in order to leave the sample in the tube as much as possible.

9 Remove and discard the swab, cover the tube with the dropper.

10 Dispense 4 drops (approximately 100 μ L) into each of the 2 sample wells in the test cassette. Read the results after 15 minutes. Do not read after 20 minutes. Note: If the dispensed drop contains air bubbles, add another drop into the well.

11 Dispose all those used materials into Bio-safety bag and seal well. Then bio-safety bag can be disposed in a household bin.

• For ADV/RSV Test

1 Bring the kit to room temperature before testing. Wash your hands and dry.

2 Check the expiry date on the box or foil bag. Check that the Test kit contents have not been previously used (these disposable materials cannot be used twice). Do not open pouch until ready to use.

3 Tear the seal of the sampling tube and put it into the test-tube rack. **Note:** For specification of 1pc/box, 2 pcs/box, 5pcs/box and 20 pcs/box, the package box can be used as test-tube rack by pushing the dotted holes on the box. For 20 pcs/box, please use the provided test-tube rack in the box.

4 Collecting the sample: Open the package containing the sterile swab. Avoid touching the cotton tip and remove the swab using the plastic handle.

5 Insert the swab into a nostril (2.5 cm). Be sure to collect any nasal drainage that may be present. Carefully rotate the swab in a circular path against the inside of the nostril at least 5 times. Using the same swab repeat the procedure in the other nostril.

6 After collecting the sample, insert the swab's cotton tip into sampling tubes containing individual lysis buffer, rotate the swab against the inner tube wall 10 times.

7 Squeeze the swab from the outer tube wall 5 times to completely dissolve the sample in the buffer.

8 Move the swab up until it is resting on the sample solution, squeeze the swab from the outer tube wall in order to leave the sample in the tube as much as possible.

9 Remove and discard the swab, cover the tube with the dropper.

10 Dispense 4 drops (approximately 100 μ L) into each of the 2 sample wells in the test cassette. Read the results after 15 minutes. Do not read after 20 minutes. Note: If the dispensed drop contains air bubbles, add another drop into the well.

11 Dispose all those used materials into Bio-safety bag and seal well. Then bio-safety bag can be disposed in a household bin.

Display of Results/Expected Values

Negative result: If only the quality control C line appears and the detection line is not visible, the sample contains no SARS-CoV-2, Influenza A, Influenza B, ADV, RSV or the concentration is lower than the limit of detection and the result is negative.

Positive result:

• SARS-CoV-2 positive result: If both the control line (C line) and the test line (nCoV line) appear at the same time, it means that SARS-CoV-2 antigen has been detected and the result is positive.

There is currently a suspicion of a COVID-19 infection.

• If you test positive, you should not visit high-risk settings like hospitals and aged and disability care settings for at least 7 days or until symptoms have gone, unless seeking immediate medical care.

• To help protect those around you, we recommend to avoiding contact with people who are at higher risk of severe disease, wearing a mask outside the home, working from home where possible, avoiding going to school, public areas, or travel on public transport, in taxis or ride-share services, practicing good hygiene, and following your local health department's advice when leaving home.

• If you have any appointments you cannot miss (visit to a doctor, family violence service or police), let them know in advance that you have COVID-19.

• If you have a Covid-19 POSITIVE result, staying at home protects the people in your community and you should not visit high-risk settings like hospitals and aged and disability care settings.

• If you feel unwell or need COVID-19 advice for someone in your care, talk with your health provider, or speak to a nurse by calling the health direct helpline on 1800 022 222.

• If you develop symptoms such as severe shortness of breath or chest pain, call triple zero (000) immediately. Tell the call handler and the paramedics on arrival if you have COVID-19.

• Most people who test positive for COVID-19 recover completely, but some people may develop long COVID. COVID-19 vaccinations, including boosters, reduce your risk of re-infection and gives the best protection against severe illness from COVID-19. After testing positive, you should wait 6 months before making a booster dose appointment.

• Influenza A positive result: If both the control line (C line) and the Influenza A test line (Flu A line) appear at the same time, it means that Influenza A antigen has been detected in the sample and the result of Influenza A is positive.

• Influenza B positive result: If both the control line (C line) and the Influenza B test line (Flu B line) appear at the same time, it means that Influenza B antigen has been detected in the sample and the result of Influenza B is positive.

• ADV positive result: If both the control line (C line) and the test line (ADV line) appear at the same time, it means that ADV antigen has been detected in the sample and the result of ADV is positive.

• RSV positive result: If both the control line (C line) and the test line (RSV line) appear at the same time, it means that RSV antigen has been detected in the sample and the result of RSV is positive.

If the quality control C line appears, and more red lines appear in the detection line area, indicating that the sample contains one or more pathogenic microorganisms.

Invalid result: If the C line does not appear, the result is invalid and a new test must be performed again.

Note:

The intensity of color that the test line area (nCoV line/Flu A line/Flu B line) shows will vary according to the concentration of SARS-CoV-2 antigen, Influenza A antigen and Influenza B antigen. The result should be determined on whether the test line is formed or not, and is irrelevant to the color intensity. Therefore, any intensity of color in the test area (nCoV line/Flu A line/Flu B line) should be considered positive.

The intensity of color that the test line area (ADV line/RSV line) shows will vary according to the concentration of ADV antigen, RSV antigen. The result should be determined on whether the test line is formed or not, and is irrelevant to the color intensity. Therefore, any intensity of color in the test area (ADV line/RSV line) should be considered positive.

For SARS-CoV-2&Flu A/B

“C”: Control Line “FluA”: Influenza A Test Line “FluB”: Influenza B Test Line
“nCov”: SARS-CoV-2 Test Line “S”: Sample Well

If you get a positive result, there is currently a suspicion of respiratory tract infection, individuals with a positive result or who are unwell are advised to consult a medical practitioner for follow up clinical care.

A negative result does not mean a person is not with respiratory tract infection. If symptoms persist the person should seek medical attention and further testing by PCR if required.

If an invalid result is produced, the user should retest with a new test.

For ADV/RSV

“C”: Control Line “A”: ADV Test Line “R”: RSV Test Line “S”: Sample Well

If you get a positive result, there is currently a suspicion of respiratory tract infection, individuals with a positive result or who are unwell are advised to consult a medical practitioner for follow up clinical care.

A negative result does not mean a person is not with respiratory tract infection. If symptoms persist the person should seek medical attention and further testing by PCR if required.

If an invalid result is produced, the user should retest with a new test.

Intended Use

The SARS-CoV-2/FluA/FluB+ADV/RSV Antigen Combo Rapid Test Kit (LFIA) is an in vitro diagnostic device that utilizes immunochromatography. It is designed for the rapid qualitative detection of antigens from SARS-CoV-2, Influenza A, Influenza B, Adenovirus (ADV), and Respiratory Syncytial Virus (RSV) in anterior nasal swabs. The test is intended for auxiliary diagnosis in symptomatic individuals with suspected respiratory viral infection. It is designed to detect SARS-CoV-2 within the first 7 days of symptom onset, and Influenza A/B, ADV, or RSV within the first 4 days of symptom onset. The test kit is designed for use as self-testing.

Storage Instructions

Validity period: 24 months at 2°C to 30°C. Do not use after expiry. Do not freeze.



Use-by date



Date of manufacture



Manufacturer



Temperature limit



This way up



Fragile, handle with care



Stacking Limit By number



Keep away from sunlight



Keep dry

Customer Support

For assistance regarding to the use of the test kit and interpretation of test results, call 1800 517 206. The service is available between 9 am to 7 pm (AEST), or 9 am to 8 pm (AEDT), 7 days per week.



MedOmics
TESTS FOR LIFE

Introduction

Coronavirus (CoV) belongs to the order Nidovirales under the Coronaviridae family with 4 genera: α, β, γ and δ. The α and β genera are only pathogenic to mammals, while γ and δ genera mainly cause bird infections. CoV is mainly transmitted through direct contact with secretions or through aerosols and droplets. There is also evidence supporting fecal-oral transmission.

7 kinds of human coronaviruses (HCoV) that cause human respiratory diseases have been identified so far, including: HCoV-229E, HCoV-NL63, HCoV-OC43, HCoV-HKU1, SARS-CoV, MERS-CoV and SARS-CoV-2. SARS-CoV-2 is one of the most contagious viral pathogens that causes human respiratory tract infections (RTI). Currently, the patients infected by SARS-CoV-2 are the main source of infection; asymptomatic infected people can also be an infectious source. Based on the current epidemiological investigation, the incubation period is 1 to 14 days, mostly 3 to 7 days. The clinical manifestations include fever, fatigue, cough and other symptoms, accompanied by dyspnea, which can rapidly develop into life-threatening severe pneumonia, respiratory failure, acute respiratory vesicle syndrome, septic shock, multiple organ failure, and severe metabolic acid-base imbalance.

Influenza, usually called flu, is an acute respiratory infection caused by Influenza virus. It is highly contagious. It is mainly spread through coughing and sneezing. It usually breaks out in spring and winter. It is mainly divided into Influenza A and Influenza B virus. Influenza A viruses are highly variable, followed by Influenza B viruses. Therefore, Influenza A viruses are more prevalent and severe, followed by Influenza B viruses. Influenza A includes H1N1, H3N2, H5N1, H7N9, and Influenza B includes Influenza B (Victoria) and Influenza B (Yamagata).

Human adenovirus(ADV) belongs to the adenoviridae family, mammalian adenovirus genus, which is a double-stranded DNA virus without an envelope, mainly infects human respiratory tract, digestive tract and urogenital tract. The main ADV related to respiratory diseases is ADV-B Group (ADV-3, 7, 11, 14, 16, 21, 50, 55), ADV-C Group (ADV-1,2,5,6) and ADV-E group (ADV-4). Acute respiratory adenovirus (ADV) infection which is one of the most common acute respiratory infections in infants and young children. It mainly causes fever, cough, dyspnea and other symptoms.

Respiratory syncytial virus (RSV) belongs to Pneumovirus of Paramyxoviridae with only one serotype, which is a single stranded negative-strand RNA virus with an envelope. RSV infection mainly causes bronchiolitis and pneumonia in infants under 6 months of age and upper respiratory tract infections such as rhinitis and colds in older children and adults.

Test Principle

SARS-CoV-2/FluA/FluB+ADV/RSV Antigen Combo Rapid Test Kit (LFIA) uses a double antibody sandwich method to detect SARS-CoV-2, Influenza A, Influenza B virus, Adenovirus (ADV), Respiratory syncytial virus (RSV) by colloidal gold immunochromatography. When the appropriate amount of test samples treated with lysis buffer is added to the sample well of the test cassette, the sample will move forward along the test strip by capillary action. If the sample contains SARS-CoV-2, Influenza A, Influenza B, Adenovirus(ADV), Respiratory syncytial virus (RSV) antigen, and the concentration is higher than the limit of detection, the antigen will form immune complexes with corresponding Nucleocapsid Protein antibody labeled with colloidal gold respectively, which are captured by lines nCoV line, Flu A line, Flu B line, ADV line, RSV line. If test sample contains SARS-CoV-2 virus, forming a red nCoV line, indicating a positive result for SARS-CoV-2. If test sample contains Influenza A virus, forming a red Flu A line, indicating a positive result for Influenza A. If test sample contains Influenza B virus, forming a red FluB line, indicating a positive result for Influenza B. If test sample contains Adenovirus, forming a red ADV line, indicating a positive result for Adenovirus. If test sample contains Respiratory syncytial virus, forming a red RSV line, indicating a positive result for Respiratory syncytial virus.

The C line should be formed to indicate that the sample has been transported properly through the membrane regardless of whether sample contains antigens or not. If the C line does not appear, it indicates that the test result is invalid and the sample need to retest.

Test Method Limitations

- The accuracy of the test is dependent on the quality of the sample. Improper sampling or storage, using expired samples or repeated frozen-thawed samples can affect the test results. Test results can also be affected by temperature and humidity.
- Negative results may be caused by low concentration of SARS-CoV-2, Influenza A, Influenza B, ADV, RSV antigens in the sample and therefore cannot completely rule out the possibility of infection.
- Some medication (e.g. high concentration of over-the-counter (OTC) or prescription medication such as nasal spray) in the collected samples may interfere with the test result. Please perform the test again if the result is in doubt.
- This product is only for qualitative testing and the specific concentration of each indicator must be measured using other quantitative methodologies.
- The test results of this kit are for clinical reference only and are not the sole basis for clinical diagnosis. The clinical diagnosis and treatment of patients should be comprehensively considered in combination with their symptoms/signs, medical history, other laboratory tests and treatment response.
- This product is less reliable in the later phase of infection and in asymptomatic individuals.
- Repeat testing (within 1-3 days) is recommended in high-risk settings or if there is an ongoing suspicion of infection.
- A positive result from this product does not necessarily determine whether a person is infectious.
- This test kit is intended for adults over the age of 18. It can be used by children aged 5 to 17 when supervised by an adult. It is not suitable for children under the age of five.
- Test kit solutions should only be used as directed; do not ingest; do not dip the swab into provided solution or other liquid before inserting the swab into the nose; avoid contact with skin and eyes; keep out of the reach of children and pets before and after use. If the extraction buffer comes in contact with the skin or eyes, flush with plenty of water. If irritation persists, seek medical advice from a doctor or your local medical centre
- If the SARS-CoV-2 test result is positive, there is currently a suspicion of a COVID-19 infection. Follow the guidance from your local State or Territory Health Department for guidance on confirmation testing if necessary, and if unwell seek medical assistance.
- If influenza A/B test result is positive: There is currently a suspicion of influenza A/B infection, individuals with a positive result or who are unwell are advised to consult a medical practitioner for follow up clinical care.
- Do not re-use the test kit.
- Do not use the test kit if the pouch is damaged, the seal is broken or the test cassette is wet or polluted.
- Do not use the test kit contents beyond the expiration date printed on the outside of the box.
- When collecting an anterior nasal swab sample, use only the Anterior Nasal Swab provided in the Kit.
- If an invalid result is produced, the user should retest with a new test.
- Do not mix with kit components from other batches.

Product Performance

• Limit of Detection-LoD

Limit of Detection (LoD) studies determined the lowest detectable concentration of SARS-CoV-2, Influenza A, Influenza B, ADV, RSV at which 100% of all (true positive) replicates test positive. (TCID₅₀/ml: The Common units of virulence of live viruses)

	Virus Strain	LoD (TCID ₅₀ /mL)		Virus Strain	LoD(TCID ₅₀ /mL)
SARS-CoV-2	Omicron/JS12/human/2022	125	ADV	ADV-1	10 ³
	A/Brisbane/02/2018 (H1N1)	10 ⁴		ADV-2	10 ³
	A/PUERTO/8/1934 (H1N1)	10 ⁴		ADV-3	62.5
Influenza A	A/Kansas/14/2017 (H3N2)	10 ²		ADV-4	4.0X10 ³
	A/Aichi/2/1968 (H3N2)	10 ²		ADV-7	10 ³
	A/Anhui/1/2013 (H7N9)	10 ⁴		ADV-55	10 ³
	B/Colorado/06/2017 (Victoria)	10 ³	RSV	RSV-A	10 ⁴
Influenza B	B/Phuket/3073/2013 (Yamagata)	10 ⁴		RSV-B	2.0X10 ³
	B/Chaoyang Beijing/12977/2017 (Yamagata)	10 ⁴			

• Analytical inclusivity

The SARS-CoV-2/FluA/FluB+ADV Test Kit (LFIA) /RSV Antigen Combo Rapid Kit detects Nucleocapsid protein, NOT spike protein of SARS-CoV-2, Influenza A/B,RSV and ADV. Influenza A (H1N1, H3N2, H5N1, H7N9) Influenza B (Victoria/Yamagata), RSV(A/B) and ADV (1,2,3,4,7,55) can be detected by the strip. And all of the following variants can be effectively detected by the product.

WHO label	Omicron	Delta					
Pango lineage	B.1.617.2	B.1.1.529	BA.2	BA.4	B.1.1.7	BA.5	BA.2.75

• Cross Reactivity

Cross reactivity of SARS-CoV-2/FluA/FluB+ADV/RSV Antigen Combo Rapid Test Kit (LFIA) was evaluated by testing commensal and pathogenic microorganisms listed below that may be present in the clinical samples. The substance below are no Cross Reactivity with test result,which the each assay marker is active on itself and does not cross-react with the other marker(For example, the SARS-CoV-2 is active against SARS-CoV-2, but has no cross-reactivity against H1N1 (2009), Influenza A H1N1, Seasonal Influenza A H3N2, Influenza A H5N1, etc)

For SARS-CoV-2/FluA/FluB: Human coronavirus OC43, Human coronavirus NL63, Human coronavirus HKU1 Human coronavirus 229E, MERS-coronavirus, SARS-coronavirus, SARS-CoV-2, H1N1(2009), Influenza A H1N1, Seasonal Influenza A H3N2, Influenza A H5N1, Influenza A H7N9, Influenza B Victoria, Influenza B Yamagata, Human Parainfluenza type 1, Human Parainfluenza type 2, Human Parainfluenza type 3, Measles, Epstein Barr Virus, Cytomegalovirus,Human metapneumovirus, Mumps virus, Rhinovirus, Enterovirus,CA16e, Adenovirus, ADV-1, ADV-2, ADV-3, ADV-4, ADV-5, ADV-6, ADV-7, ADV-55, RSV-A, RSV-B, Cytomegalovirus, Mycoplasma pneumoniae,Staphylococcus aureus, Staphylococcus epidermidis, Bordetella pertussis, Legionella pneumophilo, Streptococcus pneumoniae, Haemophilus Influenzae, Streptococcus pneumoniae, Mycobactenum tuberculosis,Candida albicans,Chlamydia pneumoniae ,Corynebacterium sp., Escherichia coli, Hemophilus influenzae, Lactobacillus sp. , Legionella spp, Moraxella catarrhalis, Neisseria meningitidis, Neisseria sp. , Pseudomonas aeruginosa, Streptococcus pyogenes, Streptococcus salivarius. For ADV/RSV: Human coronavirus OC43, Human coronavirus NL63, Human coronavirus HKU1 Human coronavirus 229E, MERS-coronavirus, SARS-coronavirus, SARS-CoV-2, H1N1(2009), Influenza A H1N1, Seasonal Influenza A H3N2, Influenza A H5N1, Influenza A H7N9, Influenza B Victoria, Influenza B Yamagata, Human Parainfluenza type 1, Human Parainfluenza type 2, Human Parainfluenza type 3, Measles, Epstein Barr Virus, Cytomegalovirus,Human metapneumovirus, Mumps virus, Rhinovirus, Enterovirus,CA16e, Adenovirus, ADV-1, ADV-2, ADV-3, ADV-4, ADV-5, ADV-6, ADV-7, ADV-55, RSV-A, RSV-B, Cytomegalovirus, Mycoplasma pneumoniae,Staphylococcus aureus, Staphylococcus epidermidis, Bordetella pertussis, Legionella pneumophilo, Streptococcus pneumoniae, Haemophilus Influenzae, Streptococcus pneumoniae, Mycobactenum tuberculosis,Candida albicans.

• Interfering Substances Effect

A study was performed to evaluate and demonstrate that the endogenous substances naturally present or drugs that may be artificially introduced into clinical samples do not inference with the detection of SARS-CoV-2, Influenza A, Influenza B, ADV, RSV in the SARS-CoV-2/Flu A/Flu B+ADV/RSV Antigen Combo Rapid Test Kit (LFIA) listed below.

Endogenous Substance: Mucin, Whole Blood, Icteric (Bilirubin) Rheumatoid factor(RF), Triglycerides, Hemoglobin, Anti-nuclear antibody, Pregnant, Total IgG, Total IgM, Total IgA. Exogenous Substance:Mupirocin, Tamiflu (Oseltamivir Phosphate) ,Fluticasone Propionate , Fluconazole,Zincum gluconium (i.e., Zicam) ,Alkalol, Phenol, Phenylephrine hydrochloride, Oxymetazolin hydrochloride, Cromolyn, Oxymetazoline, Galphimia glauca, Sabadilla, Albuterol, Acarbose, Oseltamivir, Chlorpheniramine,Diphenhydramine, Glimepiride, (Sulfonylureas), Chlorothiazide , Acetylsalicylic acid, Amoxicillin, Ibuprofen ,Beclomethasone, Indapamide, Flunisolide Guaiaacol glyceryl ether, Biotin, Zanamivir, Tobramycin, Sulfur, Ribavirin, Ephedrine,Benzocaine,Menthol, Budesonide, Triamcinolone, Dexamethasone, Sodium chloride with preservatives, Lopinavir Ritonavir, Chloroquine phosphate, Ivermectin, Mometasone, Luffa operculata, Histaminum hydrochloricum, virus vaccine, Benzocaine.

• Clinical Performance

1. SARS-CoV-2 Test

SARS-CoV-2/FluA/FluB+ADV/RSV Antigen Combo Rapid Test Kit (LFIA)	RT-PCR		
	SARS-CoV-2 Positive	Negative	Total
SARS-CoV-2 Positive	370	11	381
Negative	38	1920	1958
Total	408	1931	2339
Sensitivity: 90.69% (87.44% ~ 93.32%)	PPV: 97.11% (94.89% ~ 98.55%)		
Specificity: 99.43% (98.98% ~ 99.72%)	NPV: 98.06% (97.35% ~ 98.62%)		
Accuracy: 97.91% (97.24% ~ 98.45%)	Kappa: 0.9253		

2. Influenza A Test

The performance of SARS-CoV-2/FluA/FluB+AD-V/RSV Antigen Combo Rapid Test Kit (LFIA) was established with 1593 anterior nasal swabs collected from patients with Influenza symptoms within 7 days after onset of symptoms. Two swabs were collected with the same people, an anterior nasal swab tested directly using SARS-CoV-2/FluA/FluB+ADV/RSV Antigen Combo Rapid Test Kit (LFIA) and a nasopharyngeal or oropharyngeal swab tested by the Comparison Test Kit. Clinical samples were evaluated to be positive or negative using Comparison reference method.

SARS-CoV-2/FluA/FluB+ADV/RSV Antigen Combo Rapid Test Kit (LFIA)	comparison reagents		
	Flu A Positive	Negative	Total
Flu A Positive	188	4	192
Negative	11	1390	1401
Total	199	1394	1593
Sensitivity: 94.47%, 95%CI (90.32% ~ 97.21%)	PPV: 97.92%, 95%CI (94.75% ~ 99.43%)		
Specidity: 99.71%, 95%CI (99.27% ~ 99.92%)	NPV: 99.21%, 95%CI (98.60% ~ 99.61%)		
Accuracy: 99.06%, 95%CI (98.45% ~ 99.47%)	Kappa: 0.9563		

3. Influenza B Test

The performance of SARS-CoV-2/FluA/FluB+AD-V/RSV Antigen Combo Rapid Test Kit (LFIA) was established with 1593 anterior nasal swabs collected from patients with Influenza symptoms within 7 days after onset of symptoms. Two swabs were collected with the same people, an anterior nasal swab tested directly using SARS-CoV-2/FluA/FluB+ADV/RSV Antigen Combo Rapid Test Kit (LFIA) and a nasopharyngeal or oropharyngeal swab tested by the Comparison Test Kit. Clinical samples were evaluated to be positive or negative using Comparison reference method.

SARS-CoV-2/FluA/FluB+ADV/RSV Antigen Combo Rapid Test Kit (LFIA)	comparison reagents		
	Flu B Positive	Negative	Total
Flu B Positive	194	3	197
Negative	13	1383	1396
Total	207	1386	1593
Sensitivity: 93.72%, 95%CI (89.50% ~ 96.61%)	PPV: 98.48%, 95%CI (95.61% ~ 99.69%)		
Specidity: 99.78%, 95%CI (99.37% ~ 99.96%)	NPV: 99.07%, 95%CI (98.41% ~ 99.50%)		
Accuracy: 99.00%, 95%CI (98.37% ~ 99.42%)	Kappa: 0.9546		

4. ADV Test

The performance of SARS-CoV-2/FluA/FluB+AD-V/RSV Antigen Combo Rapid Test Kit (LFIA) was established with 186 positive sample collected from patients with ADV symptoms within 7 days after onset of symptoms. Two swabs were collected with the same people, an Nasal swab tested directly using SARS-CoV-2/FluA/FluB+AD-V/RSV Antigen Combo Rapid Test Kit (LFIA) and a Throat swab tested by the Comparison Test Kit. Clinical samples were evaluated to be positive or negative using Comparison reference method.

SARS-CoV-2/FluA/FluB+ADV/RSV Antigen Combo Rapid Test Kit (LFIA)	comparison reagents		
	ADV Positive	Negative	Total
ADV Positive	177	0	177
Negative	9	348	357
Total	186	348	534
Sensitivity: 95.16%, 95% CI: (91.01% ~ 97.76%)	PPV: 100.00%, 95% CI: (97.94% ~ 100.00%)		
Specificity: 100.00%, 95% CI: (98.95% ~ 100.00%)	NPV: 97.48%, 95% CI: (95.27% ~ 98.84%)		
Accuracy: 98.31%, 95% CI: (96.82% ~ 99.23%)	Kappa: 0.9625		

5. RSV Test

The performance of SARS-CoV-2/FluA/FluB+AD-V/RSV Antigen Combo Rapid Test Kit (LFIA) was established with 174 positive sample collected from patients with RSV symptoms within 7 days after onset of symptoms. Two swabs were collected with the same people, an Nasal swab tested directly using SARS-CoV-2/FluA/FluB+AD-V/RSV Antigen Combo Rapid Test Kit (LFIA) and a Throat swab tested by the Comparison Test Kit. Clinical samples were evaluated to be positive or negative using Comparison reference method.

SARS-CoV-2/FluA/FluB+ADV/RSV Antigen Combo Rapid Test Kit (LFIA)	comparison reagents		
	RSV Positive	Negative	Total
RSV Positive	165	0	165
Negative	9	360	369
Total	174	360	534
Sensitivity: 94.86%, 95% CI: (90.41% ~ 97.61%)	PPV: 100.00%, 95% CI: (97.79% ~ 100.00%)		
Specificity: 100.00%, 95% CI: (98.98% ~ 100.00%)	NPV: 97.56%, 95% CI: (95.42% ~ 98.88%)		
Accuracy: 98.31%, 95% CI: (96.82% ~ 99.23%)	Kappa: 0.9611		

• Usability Study

The usability study was conducted with lay persons who performed the test and interpreted the result. The test procedure and obtain consistent test results with professionals.

For SARS-CoV-2, The results were compared to an RT-PCR with a sensitivity of 94.59 % (35/37) and specificity of 99.11 % (222/224) .

For Influenza A, The results were compared to an RT-PCR with a sensitivity of 97.06 % (33/34) and specificity of 99.55 % (223/224).

For Influenza B,The results were compared to an RT-PCR with a sensitivity of 95.00 % (38/40) and specificity of 99.11 % (222/224).

For ADV, The results were compared to an RT-PCR with a sensitivity of 96.77 % (30/31) and specificity of 100 % (69/69) .

For RSV, The results were compared to an RT-PCR with a sensitivity of 94.29 % (33/35) and specificity of 100 % (65/65) .


Warnings and Precautions

- This test kit is used for in vitro diagnosis only.
- This test kit is for self-testing.
- This test kit should be used within 1 hour after opening the package. The test cassette should not be used if being wet or polluted.
- Proper protection should be taken during testing to avoid splashing when adding sample.
- Dispose of all used or damaged test cassettes, sampling tubes, droppers, swabs, or other kit components as biohazardous materials.
- Negative results do not rule out SARS-CoV-2, Influenza A, Influenza B, ADV, RSV infection, particularly in those who have been in contact with the virus.
- Bring the kit contents to room temperature before testing.
- The test is less reliable when used in the condition of later phase of infection. If testing is not performed within the first 7 days symptom onset, false SARS-CoV-2 negative results may occur. If testing is not performed within the first 4 days symptom onset, false influenza negative results may occur.
- Recommend repeat testing (e.g. within 1-3 days) if there is an ongoing suspicion of COVID/Influenza infection, being in a high risk setting or where there is an occupational risk or other requirement.
- If the test result is positive, there is a suspicion of ADV or RSV infection, and individuals are advised to consult a medical practitioner for follow-up care.
- This test kit is designed for individuals by 18 or older. It can be used by children aged 5 to 17 when supervised by an adult. It is not suitable for children under the age of five.
- A negative result does not mean a person is not infectious or does not have influenza. If symptoms persist the person should seek medical attention and further testing by PCR if required.
- A negative result does not rule out infection with another type of respiratory virus.
- A positive result cannot necessarily determine whether a person is infectious.
- Do not mix buffers between test kits.Before dropping the processed solution into the test cassette, carefully check that the correct buffer and cassette are being used together.

Report Performance or Usability Issues:Contact TGA for calling 1800 809 361 to report poor performance or usability issues in the self-test environment. Report an issue via the Users Medical Device Incident Report, email: iris@health.gov.au

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