One-step Canine Distemper virus, Adenovirus and Influenza virus Antigen Test

# Anigen Rapid CIRD-3 Ag Test Kit

## ■ Principles

The general canine respiratory symptoms that could be caused by a number of different viral or bacterial agents are cough, fever, and nasal discharge in dog. These diseases are difficult to differential diagnosis by only clinical signs and there are recommend treatments and quarantine protocols depending on the pathogens. **The Anigen Rapid Canine Infectious Respiratory Disease (CIRD)-3 Ag Test Kit** is a chromatographic immunoassay for the qualitative detection of canine infectious respiratory disease antigens such as: **Canine Distemper virus**, **Canine Adenovirus (Infectious Canine Hepatitis)** and **Canine Influenza virus** in conjunctiva and nasal discharge. **The Anigen Rapid CIRD-3 Ag Test Kit** has a letter of "T" "T1" "T2" and "C" as test line and control line on the surface of the device. Both the test line and the control line in the result window are not visible before applying any samples. The control line is used for procedural control. The Control line should always be visible. If the test procedure is performed properly and the test reagents of the control line are working, a purple test line will be visible in the result window if there is enough Canine Distemper virus antigens, Canine Adenovirus antigens or Canine Influenza virus antigens in the specimen.

The specially selected Canine Distemper virus antibodies, Canine Adenovirus antibodies and Canine Influenza virus antibodies are used in test band as both capture and detector materials. These enable the Anigen Rapid CIRD-3 Ag Test Kit to identify **Canine Distemper virus**, **Canine Adenovirus** and **Canine Influenza virus** in conjunctiva and nasal discharge with a high degree of accuracy.

## ■ Materials provided (10 tests/kit)

1) Ten(10) Anigen Rapid CIRD-3 Ag Test Kits
2) Ten(10) Specimen tubes containing assay diluent buffer
3) Ten(10) Sample collection swabs
4) Ten(10) Disposable droppers
5) One(1) Instruction for use

## ■ Precautions

1) For veterinary diagnostic use only.
2) For best results, strict adherence to there instructions is required.
3) All specimens should be handled as being potentially infectious.
4) Do not open or remove test kit from their individually sealed pouches until immediately before their use.
5) Do not use the test kit if the pouch is damaged or the seal is broken.
6) Do not reuse test kit.
7) All reagents must be at room temperature before running the assay.
8) Do not use reagents beyond the stated expiration date marked on the label.
9) The components in this kit have been quality control tested as standard batch unit. Do not mix components from different lot numbers.

## ■ Storage and Stability

The kit can be stored at room temperature(2~30℃) or refrigerated. The test kit is stable through the expiration date marked on the package label. **DO NOT FREEZE**. Do not store the test kit in direct sunlight.

## ■ Specimen Collection and Preparation

1) The test should be performed using the canine secretion of eye (the conjunctiva) and nasal discharge simultaneously.
2) After collecting the specimen using swab, the specimen should be immediately extracted and tested.
3) If specimens are not immediately tested, they should be refrigerated at 2~8℃, For storage not less than 48 hours, freeze the specimen at -20℃ or below.

## ■ Procedure of the test

1) Collect the samples from conjunctiva and nasal discharge using the sample collection swab pre-wetted with saline solution.
2) Insert the swab into the specimen tube containing assay diluent.
3) Mix the swab samples with assay diluent to extract well.
4) Remove the test device from the foil pouch, and place it on a flat and dry surface.
5) Respectively, add four (4) drops of the mixed sample into the 2 sample holes using the dropper, drop by drop and slowly
6) As the test begins to work, you will see purple color move across the result window in the center of the test device. If the migration has not appeared after 1 minute, add one more drop of the mixed sample to the sample well.
7) Interpret test results at 5-10 minutes.

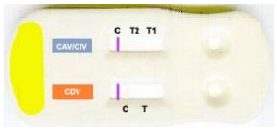
**[Figure for test procedures]**

## ■ Interpretation of the test

A color band will appear in the left section of the result window to show that the test is working properly. This band is the control band(C). The right section of the result window indicates the test results. If another color band appears in the right section of the result window. This band is the test band. (T, T1, and T2)

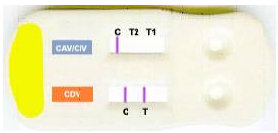
**1) Negative result**

The presence of only one band within the result window on both of the CAV/CIV Ag and CDV Ag test area indicates a negative result.



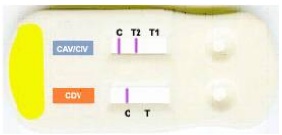

**2) CDV Ag Positive result**

The presence of two color bands ("T" and "C") within the result window on CDV Ag test area, no matter which band appears first indicates a positive result of canine distemper virus.



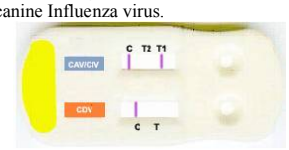

**3) CAV Ag Positive result**

The presence of two color bands ("T2" and "C") within the result window on CAV/CIV Ag test area, no matter which band appears first indicates a positive result of canine Adenovirus.



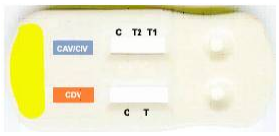

**4) CIV Ag Positive result**

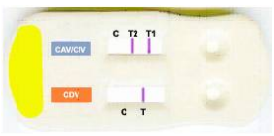
The presence of two color bands ("T1" and "C") within the result window on CAV/CIV Ag test area, no matter which band appears first indicates a positive result of canine Influenza virus.




**5) Invalid Result**

If the purple color band is not visible within the result window after performing the test, the result is considered invalid. The directions may not have been followed correctly or the test may have deteriorated. It is recommended that the specimen be re tested.




## ■ Limitations of the test

Although the Anigen Rapid CIRD-3 Ag Test kit is very accurate in detecting Canine Distemper virus antigen, Canine adenovirus and Canine Influenza virus, a low incidence of false results can occur. Other clinically available tests are required if questionable results are obtained. As with all diagnostic tests, a definitive clinical diagnosis should not be based on the results of a single test, but should only be made by the veterinarian after all clinical and laboratory findings have been evaluated.

## ■ Bibliography of suggested reading


1) Tsuyoshi GEMMA, Naoko MIYASHITA, Yeon-Sil SHIN, Masatsuge OKITA, Takeshi MORI, Kiyoco IWATSIKI, Takeshi MIKAMI and Chieko KAI " Serological Survey of Cnine Distemper Virus Infection Using enzyme Linked Immunosorvent Assay " J. Vet. Med. Sci.57(4) : 761~63, 1995
2) Yeon-Sil SHIN, Takeshi MORI, Masatsuge OKITA, Twuyochi GEMMA, Chieko KAI and Takeshi MIKAMI "Detection of Canine Distemper Virus Nucleocapsid Protein Gene in Canine Peripheral Blood Mononuclear Cells by RT-PCR" J Vet. Med Sci. 57(3) : 439-445, 1995
3) Rodriguez-Tovar LE, Ramírez-Romero R, Valdez-Nava Y, Nevárez-Garza AM, Zárate-Ramos JJ, López A. Combined distemper-adenoviral pneumonia in a dog.Can Vet J. 2007 Jun;48(6):632-4.
4) Rycroft AN, Tsounakou E, Chalker V.Serological evidence of Mycoplasma cynos infection in canine infectious respiratory disease.Vet Microbiol. 2007 Mar 10;120 (3-4):358-62.



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