# Leptospira IgM Ab Test kit

#### Introduction

SensPERT ®

Leptospirosis is an infectious disease caused by *Leptospira spp*. There are at least four species of the Leptospira bacteria (or serovars) that can infect dogs: canicola, icterohemorrhagiae, grippotyphosa, and pomona. The severity of symptoms varies, and depends on the dog (age, immune response, vaccination status), the strain of *Leptospira*, and other factors. Some dogs may have mild symptoms or no symptoms at all, but severe cases can be fatal. Signs appear 4 to 12 days after exposure. In early stage, fever is present. Other signs are loss of appetite for several days, vomiting, lethargy, depression, muscle pain, and sometimes diarrhea or blood in the urine.

# Principles

SensPERT<sup>TM</sup> Leptospira IgM Ab Test Kit is designed to detect Leptospira IgM antibodies in canine whole blood, serum or plasma. After being absorbed into the cellulose pad, the antibodies of Leptospira move and bind with gold-colloid complex. This complex is binding test line in the nitrocellulose membrane. The test results can appear on Control (C) and Test (T) lines where the principles of immunochromatography are used.

## Characteristics

- 1) One-step rapid test of Canine Leptospira IgM antibody
- 2) Rapid test results between 5 ~ 10 minutes
- 3) Expensive equipment not required
- 4) Easy storage and maintenance
- 5) High-purity and high-quality materials of the test kit increase its sensitivity and specificity.

#### ♦ Materials (10 tests/kit)

1) Test	10 uni	ts
2) Diluent (buffer) 2 ml	x 1 un	it
3) Disposable dropper for sample collection	10 unit	ts

#### Composition

Specimen well (S: for dropping), Test line (T), and Control line (C) are marked on the device. Inside of it, the strip is composed of sample pad, conjugate pad, nitrocellulose membrane (test paper) and absorbent pad

#### • Effect

Detection of Canine Leptospira IgM antibody from Canine whole blood, serum or plasma

# Uses

1) Specimen

Canine whole blood, serum or plasma

## 2) Test procedure

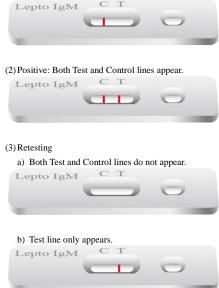
- a) When specimen and test kits are stored at cold circumstances (2~8 °C), put them at room temperature for 15~30 minutes before use.
- b) Take out a device from a pouch and place it on a horizontal surface.
- c) Using a dropper as a pipette, obtain the specimen and dispense 1 drop  $(10\mu\theta)$  of the fluid into the specimen well (S).
- d) When the specimen is completely absorbed into the specimen well (S), Drop about 2 drops  $(80\mu\ell)$  of buffer.
- e) Read the test results between 5 ~ 10 minutes.
   Invalid result after 10 minutes.

# 3) Interpretation of the results

A purple band should appear on the control line regardless of the test result. The presence of another band on the test line determines the result.

- Control Line (C): The line should always appear regardless of the presence of the antibodies of Leptospira. If this line does not appear, the test should be considered invalid. This might be because of impure buffer or the lack of specimen. It should be tested again with another kit.
- Test Line (T)  $\quad$  : The presence of IgM antibodies of Leptospira determines the test line.

## (1) Negative: Control line only appears.



#### Leptospira IgM Positive (+):

A positive result implies that the dog has the anti-Leptospira IgM. The dog is in an initial infection phase or in non-suspected dogs may occur as a result from previous vaccination or acute but sub-clinical infection.

#### Leptospira IgM Negative (-):

A negative result implies that the dog has no anti-Leptospira IgM. If the dog is suspected to be infected but has negative result, it needs to be tested repeatedly 2 or 3 times more. The time of the test could have been the period of seroconversion.

# • Further examinations

This test is for primary screening only. Consult veterinarians for further necessary examinations to obtain clinical test results.

## Precautions

- 1) Use for canine in-vitro diagnostic purposes only.
- Use within 10 minutes after opening the pouch because the test kit is very sensitive to moisture and its effect may diminish.
- 3) Be careful of not touching the result window.
- 4) Every specimen should be used with different droppers.
- 5) For testing, the buffer included should be used.
- 6) Do not use specimen showing hemolysis or being contaminated with microbes, which may cause false positive or false negative result.
- 7) Deal with specimen carefully. They can deliver unknown virus or infectious bacteria.
- Use disposable gloves when you suspect the infection caused by specimen. And wash your hands later.
- 9) Dispose solid wastes after sterilizing them at  $121 \,^{\circ}{
  m C}$  for over 1 hour.
- Do not use the kit when its pouch is torn, sealing is not good in shape or expiration date is passed.

#### ♦ Storage method

The test kits stored at 2~30  $^\circ C$  can be used for 24 months after manufacturing. Do not keep them in a refrigerator. However, if they are stored under cold circumstances, keep them at room temperature for 15 ~ 30 minutes before use.

# Exchange

The test kits are manufactured under strict quality control system. Nevertheless, if they are deteriorated during delivery, ask our distributors for exchange.

#### 🔶 Liability

The entire risk due to the performance of this product is assumed by the purchaser. The manufacturer shall not be liable for indirect, special or consequential damages of any kind resulting from use of this product.

Date issued : Feb 20, 2020 AI25-01E-03





# **Instruction for Leptospira IgM Ab test**

