

### +Introduction

**Ehrlichiosi/Anaplasmosis/Heartworm/Babesia gibsoni virus Ab Rapid Test Kit** use immunochromatographic technology to qualitatively detect dog disease of Ehrlichia Ab, Anaplasma Ab, Heartworm Ag and Babesia Ab in whole blood, serum or plasma. After the sample is added to the well, it moves along with the colloidal gold-labeled monoclonal antibody / antigen along the chromatography membrane. If the corresponding antigen / antibody is present in the sample, it will bind to the antigen / antibody on the detection line and show a wine red color. If no antigen / antibody is present in the sample, no color response is produced. A wine-red C line will appear to confirm the test is operated correctly.

### +Components

1	Test Device	10
2	Dropper	10
3	Dilution Buffer	1
4	Instruction	1

### +Notice

- 1) DO NOT use the test device if it is expired or its foil pouch is broken. Make sure use the device within 1 hour after open the pouch.
- 2) The kit is suggested to be stored at ambient, if it is store in cold environment, do not open the foiled pouch before the test device back to ambient temperature to avoid condensation.

- 3) DO NOT touch the membrane from sample well and observation window.
- 4) To get accurate result, make sure to collect fresh sample without contamination. If sample contains too much blood lipid, centrifuge the sample, then take the serum without lipid contamination.
- 5) Store serum sample at 4°C when test take place in 48 hours, store at -20°C for long time preservation.
- 6) Whole blood sample without anticoagulant should be tested as soon as possible, if partially coagulated, please separate serum for test. Whole blood sample with anticoagulant should be tested within 24 hours, do not freeze it in case of hemolysis which will interfere the test.
- 7) Make sure the used test device is treated properly according to the local biosafety regulations.

### +Storage and Stability

- 1) Store the test kit at 2~30°C. DO NOT FREEZE.
- 2) Do not store the test kit in the direct sunlight.
- 3) The test kit is stable within the expiration date marked on the package label.

### +Collection and Preparation of Sample

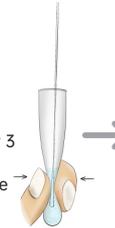
1. The test should be performed using serum, plasma, or whole blood (anticoagulated). Please follow the below method for sample collection and preparation.
2. If the test kit and samples are refrigerated, they should be brought to room temperature (15~30 °C ) prior to use.
3. **Collection:**
  - 1) **Whole blood and plasma** should be collected with a disposable syringe and added to a tube containing anticoagulant (Heparin, EDTA or Citrate).
  - 2) **Serum:** Blood should be collected with a disposable syringe and added to a serum collection tube (no anticoagulant), leave to settle for 30 minutes for blood coagulant and then centrifuge to get serum supernatant.
4. **Sample storage:**
  - 1) **Whole blood** should be tested immediately or within 4 hours at room temperature. It must be stored at 2~8 °C for 24 hours. \* Note: Blood samples should not be frozen prior to testing. Severely hemolyzed blood samples may affect the result.
  - 2) **Serum and plasma** can be stored at 2~8 °C (35.6~46.4 °F) for up to 2weeks. For longer storage, they can be stored frozen at -20 °C (-4 °F) or below for up to 1 year.

## +Test Procedure

1) Collect whole blood and separate the plasma or serum by centrifuge at 3000 rpm for 3-5 minutes. Or separate serum from the whole blood by store at 4°C over night.



2) Take out the test device from the foil pouch and put on a flat surface. Using dropper add 2 drops of serum to Heartworm sample well. Other 3 sample well using a dropper as a pipette, obtain the specimen and dispense 10ul (black line) of the fluid into the specimen well (S).



3) Add 3 drops of dilution buffer into sample well marked "S" on the device. During this period, wine-red fluid flow over the membrane inside the window can be observed. If no flow is observed, gently press the position between sample well and window to help the fluid flow.



4) Place the device on a flat surface upward and wait for 5-10 minutes.



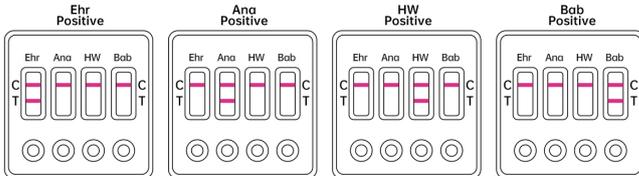
5) Read the result of color change in T line and C line within 10 minutes. Color change after 10 minutes is not valid result.



## +Interpretation of the Result

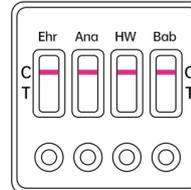
### 1) Positive result

Both on T Line and C line being seen wine-red color reaction.



### 2) Negative result

No color reaction on Test Line (T Line), only on Control Line (C Line) being seen wine-red color reaction.



### 3) Invalid result

No color appears on C Line. Indicate something wrong with the test kit or operation. The result shall not be considered as valid.

