C-Reactive Protein Rapid Test Kit

Catalog No.: abx092197

Size: 100 tests

Storage: Store all reagents at 2°C – 30°C. Keep dry.

Application: For qualitative detection of C-Reactive Protein in human serum, plasma, or whole blood.

Introduction and Assay Principle

Abbexa's C-Reactive Protein Rapid Test Kit is based on the gold immuno-chromatography assay (GICA) principle. Any C-Reactive Protein present in the samples combines with the colloidal gold particle-labelled anti-CRP antibody. When the concentration of C-Reactive Protein in the sample is more than the detection limit, there is a color change in the detection line and the result is positive. When the concentration of C-Reactive Protein in the sample solution is less than the detection limit, there is no color change in the detection line and the result is negative.

Kit Components

- Test strips
- Sample diluent

Material Required But Not Provided

- High-precision pipette and sterile pipette tips
- Timer
- Specimen container

A. Sample preparation

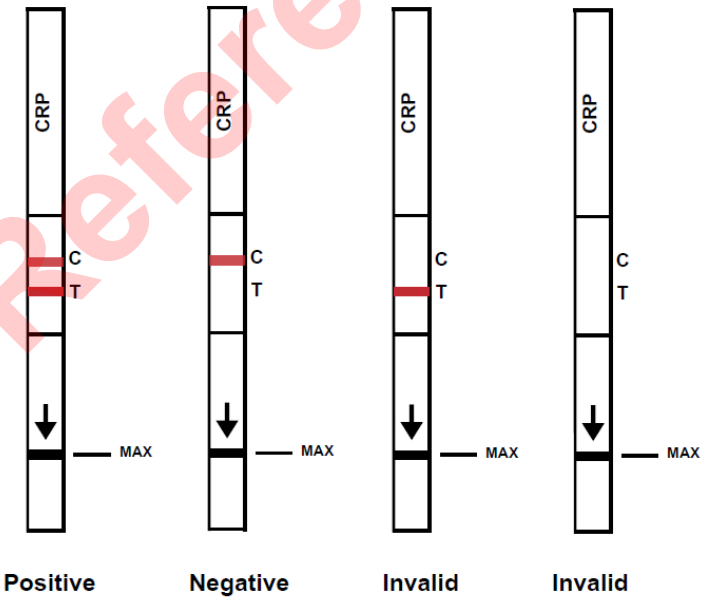
- **Serum:** Samples should be collected into a serum separator tube. Coagulate the serum by leaving the tube undisturbed at room temperature for 30 min. Centrifuge at approximately 1000 × g for 15 mins between 2-8°C. If a precipitate appears, centrifuge again. Take the supernatant and test within 4 hours, or aliquot the supernatant and store between 2-8°C for up to 5 days, or at or below -20°C for up to 3 months.
- **Plasma:** Collect plasma using EDTA or Heparin as anticoagulant. Centrifuge for 15 mins at 1000 × g between 2-8°C, within 30 mins of collection. If precipitate appears, centrifuge again. Take the supernatant and test within 4 hours, or aliquot the supernatant and store between 2-8°C for up to 5 days, or at or below -20°C for up to 3 months.
- **Whole blood:** Collect whole blood using an anticoagulant tube, then test within 4 hours or store between 2-8°C for up to 3 days. Do not freeze whole blood samples.

Note:

- Fresh samples are recommended.
- It is recommended to use serum or plasma samples rather than whole blood.
- EDTA or sodium heparin can be used as plasma anticoagulant.
- Avoid repeated freeze/thaw cycles, bacterial pollution, visible particles; and avoid cloudy, hemolytic, or viscous samples.
- Do not use heat inactivated samples as heat inactivation will degrade antibodies.
- Bring samples to room temperature before carrying out the assay.

B. Assay procedure

1. Remove the test strip from foil bag. Add 10 µl of sample (serum, plasma, or whole blood) to a tube of sample diluent. Mix well.
2. Insert the strip into the tube of standard diluent and mix thoroughly. The solution level should not exceed the MAX line. Start the timer.
3. After 2.5 minutes, analyze the result. The result is invalid if read after 15 minutes.



C. Results analysis

- **Positive result:** A colored line is observed in both the control (C) section and the test (T) section.
- **Negative result**: A colored line is observed in the control (C) section but not the test (T) section.
- **Invalid result**: No colored line is observed in the control (C) section.

Notes

- Test strips and samples should be brought to room temperature before use.
- After opening the aluminum foil, use the test strip as soon as possible (within 1 hour).
- Avoid touching the test strip on or below the result/test line areas.
- False positive results can be caused by several factors, such as: cross-reaction of similar antibody components in blood; cross-contamination of samples during transportation and treatment; contamination of test components during the assay.
- False negative results can be caused by several factors, such as: components in the sample blocking the antigen epitope, preventing the antigen from binding to the antibody; sample degradation; analyte concentration is lower than the detection limit of the kit.
- This kit is for qualitative detection of C-Reactive Protein (CRP) in human serum, plasma, and whole blood samples. For other sample types, a preliminary experiment is recommended to determine compatibility with this kit.
- Concentrations of Hemoglobin above 5 g/L, triglyceride above 25 g/L, and bilirubin above 0.1 g/L can interfere with the assay.
- This kit is for research use only and the results are for reference only. It is recommended to use this kit in conjunction with another detection method.
- All waste should be disposed of appropriately. Please note that you may need to follow special waste disposal procedures for infectious samples. Please check local disposal regulations.

Technical Support

For troubleshooting and technical assistance, please contact us at support@abbexa.com.