

Instructions for Use

Version: 2.0.1
Revision date: 23-Jan-2025

Human Mononucleosis IgG/IgM (EBV IgG/IgM) Rapid Test Kit

Catalog No.: abx472029

Size: 50 tests

Storage: Store all reagents at 2-30°C. Keep dry. Do not freeze.

Application: For qualitative detection of 4 serological markers of Epstein-Barr Virus (EBV) in human whole blood, serum or plasma. These serological markers are VCA-IgM and VCA-IgG (on right side of the cassette), and heterophile antibodies (IgM), and EBNA-IgG (on the left side of the cassette).

Introduction and assay principle

Abbexa's Mononucleosis Rapid Test Kit is based on the gold immuno-chromatography assay principle. Any EBV antibodies present in the samples bind with colloidal gold particle-labelled antigens. Anti-IgG and Anti-IgM antibodies are coated on the test lines G and M respectively. When the concentration of EBV antibodies in the sample is more than the detection limit, there is a color change in the respective detection line and the result is positive. When the concentration of EBV antibodies in the sample solution is less than the detection limit, there is no color change in the respective detection line and the result is negative. To serve as a control, there is a line that will always change from blue to red, showing that sufficient specimen has been added and that membrane wicking has occurred. If this line does not appear, the test is not valid.

Kit Components

- Test cassettes
- Droppers
- Buffer

Material Required But Not Provided

- Lancing device for whole blood test
- Timer

Sample preparation

- **Serum, plasma or whole blood:** Collect a serum, plasma or whole blood sample into a dry sterile container. Fresh samples are recommended. Plasma and whole blood samples should be anticoagulated. Avoid repeated freeze/thaw cycles, bacterial pollution, visible particles; and avoid cloudy, hemolytic, or viscous samples. Serum, plasma or whole blood samples should be tested immediately or stored at 2-8 °C for up to 48 hours.

Assay procedure

Bring all kit components and samples to room temperature prior to assay. The test cassette should be used within 1 hour after removing from the sealed pouch.

1. Take a test cassette and lay it flat on a clean table.
2. **Whole blood samples:** Hold the dropper vertically and add approximately 50 µl of whole blood sample to each sample well on the test cassette. Slowly and vertically add 1 drop (approximately 30 µl) of

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sample buffer to the wells and start the timer. Avoid foaming.

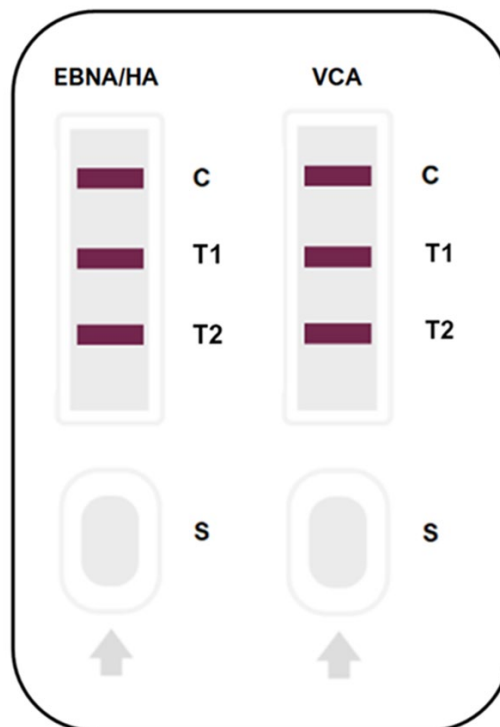
Serum or plasma samples: Hold the dropper vertically and add 1 drop (approximately 30 µl) of sample buffer to each sample well on the test cassette. Slowly and vertically add 1 drop (approximately 30 µl) of sample buffer to the wells and start the timer. Avoid foaming.

3. Leave at room temperature for 15 min, then analyze the result. Results must be read immediately after 15 minutes.

Results analysis

Valid results will have a red line in the control region (C). If the line does not completely change from blue to red, then disregard the result. Review the procedure and repeat the test with a new cassette.

- **EBNA IgG positive:** Red line appears in T1 region.
- **Heterophile IgM positive:** Red line appears in T2 region.
- **VCA IgG positive:** Red line appears in T1 region.
- **VCA IgM positive:** Red line appears in T2 region.



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Anti-EBV antibodies				Condition
HA	VCA-IgM	VCA-IgG	EBNA-IgG	
-	-	-	-	No infection
+/-	+	+	-	Recent infection
+/-	+	-	-	Recent infection /non-specific reaction
-	-	+	+	Past infection
+/-	-	+	-	Recent/past infection
+/-	+	+	+	Late primary infection
-	-	-	+	Past infection or non-specific reaction
+	-	-	-	Inconclusive or HA non-specific reaction

Notes

1. The test cassettes should be brought to room temperature before use.
2. After opening the aluminum foil, use the test cassette as soon as possible.
3. Samples should be clear with no visible particles, turbidity or bacterial pollution.
4. Do not mix or re-use the pipettes to avoid cross-contamination.
5. Do not use water, PBS, or similar solutions as the negative control.
6. Avoid touching the cassette membrane through the sample well or test result window.
7. This kit is for qualitative detection of EBV antibodies in serum, plasma or whole blood samples. For other sample types, a preliminary experiment is recommended to determine compatibility with this kit. Positive samples can be tested with another method (e.g. HPLC, LC/MS) for quantitative results.
8. This kit is for research use only and the results are for reference only.
9. It is recommended to use this kit in conjunction with another detection method.
10. 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.