

Instructions for Use

Version: 1.1.1
Revision date: 4-Jan-24

Human Monkeypox Antigen (MPXV) Rapid Test Kit

Catalog No.: abx092162

Size: 100 tests

Storage: Store all reagents at 4-30 °C. Keep dry.

Application: For qualitative detection in Human serum, plasma, whole blood, and lesion exudate samples.

Introduction and assay principle

Abbexa's Human Monkeypox Antigen Rapid Test Kit is a lateral flow immunoassay for qualitative detection of Monkeypox Antigen in human samples. The sample pad inside the cassette contains a Monkeypox Antigen mouse monoclonal antibody coated with gold nanoparticles, which combines with any Monkeypox Antigen present in the sample, creating an antigen-antibody complex. The test region on the nitrocellulose membrane is coated with a Monkeypox Antigen monoclonal antibody, which binds to the antigen-antibody complex, and the control region is coated with a goat anti-mouse antibody, which binds to the gold-labeled antibody, confirming if the test is successful. When the concentration of Monkeypox Antigen in the sample is more than the detection limit, there is a color change in the test region and the result is positive. When the concentration of Human Monkeypox Antigen in the sample solution is less than the detection limit, there is no color change in the test region and the result is negative.

Kit Components (100 tests)

- Test cassettes: 100
- Sample diluent: 4 vials
- Safety lancets: 100
- Alcohol pads: 100

Material Required But Not Provided

- High-precision pipette and sterile pipette tips
- Eppendorf tubes
- Sterile swabs and needles
- Timer

Sample preparation

- **Serum, plasma, and whole blood:** Samples should be collected using conventional methods and stored between 2-8 °C for short-term storage (up to 1 week) or -20 °C for long-term storage. Whole blood should be anticoagulated and tested immediately or stored between 2-8 °C for up to 2 days. Fresh samples are recommended. Frozen samples should be completely thawed and mixed well prior to testing. Avoid repeated freeze/thaw cycles, bacterial pollution, visible particles; and avoid cloudy, hemolytic, or viscous samples.
- **Lesion exudate:** Disinfect the wound with alcohol and dry with an absorbent cloth. Pick pustules using a sterile needle. With a sterile swab, wipe the lesion and rotate for 10-30 seconds. Insert the swab into clean Eppendorf tube and add 15 drops of sample diluent. Rotate the swab against the inside of the vial and squeeze 10 times. Remove the swab and close the tube cap. Assay immediately or store between 2-8 °C for up to 48 hours.

Assay procedure

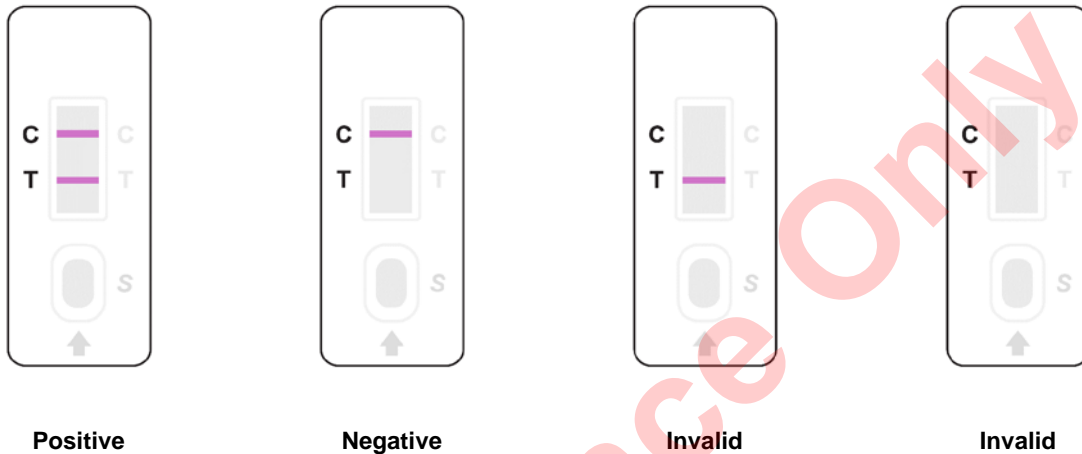
1. Bring all samples and reagents to room temperature before use. Take a test cassette and lay it flat on a clean table.
 - **Serum, plasma, and whole blood:** Add 20 µl of sample to the sample well on the test cassette, then slowly and vertically add 3-4 drops of sample diluent directly into the sample well. Avoid foaming and overfilling the sample well. Start the timer.
 - **Lesion exudate:** Slowly and vertically add 80-100 µl of prepared sample to the sample well on the test cassette. Avoid foaming and overfilling the sample well. Start the timer.
2. Leave at room temperature for 15 minutes, then analyze the result. The result is invalid if read after 30 minutes.

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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.



Interpretation

- A negative result indicates that there is no Monkeypox Antigen present in the sample. If there are acute symptoms present, Monkeypox infection cannot be excluded.
- A positive result indicates that Monkeypox Antigen is present in the sample. It is recommended to use another detection method to confirm and analyze the result.

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 disposable pipettes to avoid cross-contamination.
5. Avoid touching the cassette membrane through the sample well or test result window.
6. This kit is for qualitative detection of Human Monkeypox Antigen in serum, plasma, whole blood, and lesion exudate samples.
7. 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.
8. All waste should be disposed appropriately. Please note that you may need to follow special waste disposal procedures for infectious samples. Please check local disposal regulations.