



Monkeypox Virus Nucleic Acid Detection Kit (Fluorescent PCR)

Product Introduction

Monkeypox is a viral zoonosis (a virus transmitted to humans from animals) with symptoms very similar to those seen in the past in smallpox patients. It is caused by the monkeypox virus which belongs to the orthopoxvirus genus of the Poxviridae family. There are two clades of monkeypox virus: the West African clade and the Congo Basin (Central African) clade. Monkeypox virus is transmitted from one person to another by close contact with lesions, body fluids, respiratory droplets and contaminated materials such as bedding.

This kit is used for the qualitative detection of the monkeypox virus nucleic acid in specimens of lesion surface swabs, lesion exudate or whole blood from suspected cases. The kit contains a specific ready-to-use system for the detection of the monkeypox Virus. In order to control the entire extraction and detection process, human gene was act as a non-competitive internal control during the extraction and detection process.

Product Features



• Fast Detection

Completes the entire process within a minimum of 30 minutes (with fast mode specially on Bioer real-time PCR systems)

• High sensitivity

The kit can detect monkeypox virus with detection rate equal or higher than 95% at the concentration equal or higher than 500 copies/mL

• Accurate diagnosis

Qualitative detection of the monkeypox virus nucleic acid include the West African clade and the Congo Basin (Central African) clade

• Strong specificity

No cross reactivity with Enterovirus 71, Measles Virus, Rubella Virus, Varicella Zoster Virus, Herpes Simplex Virus I, Herpes Simplex Virus II, Epstein-Barr Virus, Cytomegalovirus, Human Herpesvirus Type 6, Human Herpesvirus Type 7 and Human genomic DNA etc.

• Strong stability

Endogenous inhibitors (blood, mucin, etc.) and exogenous inhibitors (contains medications commonly used to treat or treat similar symptoms such as dexamethasone, budesonide, etc.) in the samples had no significant effect on the test results.

• CE *in vitro* diagnostic medical devices

Product Information

Parameters	Description
Sample type	Specimens of lesion surface swabs, lesion exudate or whole blood
Sensitivity	500 copies/mL
Accuracy	CV < 5%
Detection ability	Qualitative detection of the monkeypox virus nucleic acid include the West African clade and the Congo Basin (Central African) clade
Applicable instrument	Bioer QuantGene 9600 Fluorescent Quantitative Detection System (FQD-96C) & LineGene 9600 Plus Fluorescent Quantitative Detection System (FQD-96A)
Detection Time	≤30 min (with fast mode)
Storage condition	-20 ± 5 °C

Application case

Case 1

After the positive reference P1-P4 and negative reference N1-N8 of Bioer Technology were redissolved according to test requirements, the MagaBio plus Virus DNA /RNA Purification Kit III (BSC86S1E) was used to extract and use this kit to test the accuracy.

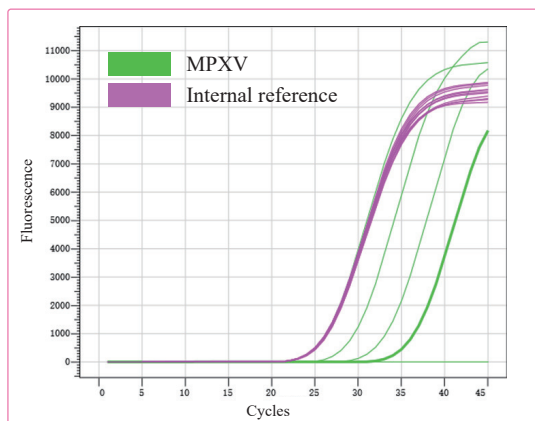


Figure 1 Positive reference P1-P4 and negative reference N1-N8

※**Results:** The results showed that Monkeypox virus nucleic acids could be detected accurately. Bioer technology reference test results: positive rate of 100%, negative rate of 100%.

Case 3

10 times gradient diluted control materials of Monkeypox virus were extracted by MagaBio plus Virus DNA /RNA Purification Kit III (BSC86S1E) and detected by this kit.

※**Results:** The results showed that the correlation coefficient of Monkeypox virus was above 0.995, and the linear relationship was good, indicating that the kit had excellent performance.

Case 2

The precision reference J1-J2 of Monkeypox Virus Nucleic Acid Detection Kit (Fluorescent PCR) were redissolved according to the test requirement. After purification steps, 3 batches of J1-J2 were detected by this kit. The whole tests were repeated 10 times to verify the precision.

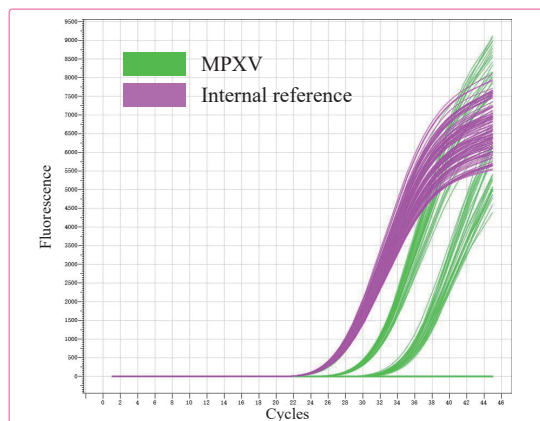


Figure 2 Amplification curve of precision test

※**Results:** The results showed that the precision variation coefficients of the three batches of reagents were all less than 5%, indicating that the reagents had good precision.

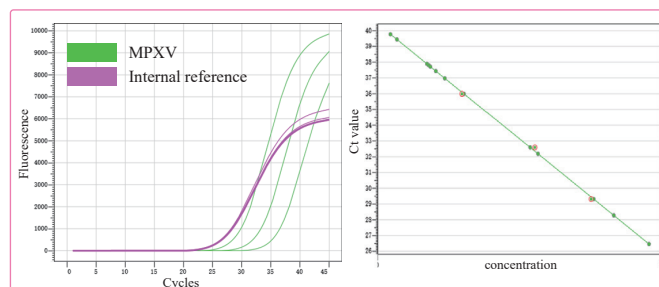


Figure 3 Amplification curve and standard curve of Monkeypox virus

Ordering Information

Product Name	Cat#	Package	Notes
Monkeypox Virus Nucleic Acid Detection Kit (Fluorescent PCR)	BSJ32S1	24T	The kit can be stored for 3 days at 2-8 °C after opening
	BSJ32M1	48T	



BIOER
TECHNOLOGY

Add: 1192 Bin An Rd., Hi-tech (Binjiang) District, Hangzhou, 310053, P.R.China

Web: www.bioer.com.cn

Tel: +86-571-87774513 Fax: +86-571-87774553

E-Mail: reagent@bioer.com.cn

E-Date: 2022.05

