



“Ready & Easy-to-use” kits.  
Lyophilised product



Transport and storage at room temperature.  
Shelf-life: 24 months



CE marked

TROPICAL & VECTOR-BORNE

MPX  
MONOPLEX

## Monkeypox virus

MPXV (Monkeypox virus) is a viral illness caused by the monkeypox virus, a member of the *Orthopoxvirus* genus. There are two distinct clades of the virus: Clade I with sub-clades Ia and Ib, and clade II, with subclades IIa and IIb.

- ▶ **Transmission** occurs through direct contact with an infected individual, contaminated materials, or infected animals. The virus can enter the body through broken skin, the respiratory tract, or mucous membranes.

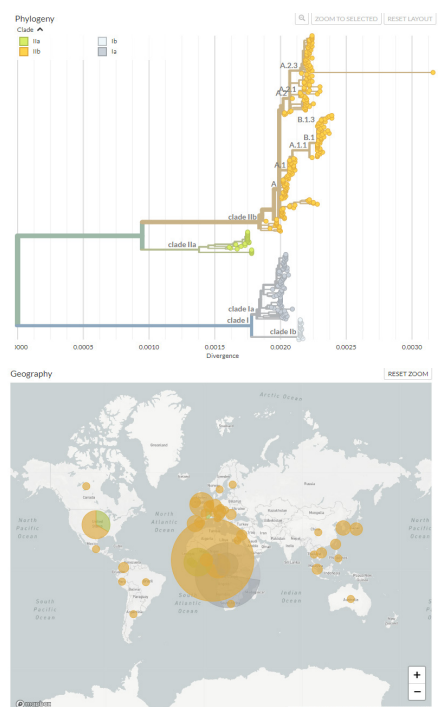
**Common symptoms** of mpox include a skin rash or mucosal lesions, which can persist for 2–4 weeks, often accompanied by fever, headache, muscle aches, back pain, fatigue, and swollen lymph nodes. These symptoms typically appear within a week, but can manifest anywhere between 1 to 21 days after exposure. While the symptoms generally last 2–4 weeks, they may persist longer in individuals with weakened immune systems.

- ▶ In 2022–2023, a global outbreak of mpox, driven by the Clade IIb strain originating from Nigeria, affected nearly **100,000 people across 116 countries**, predominantly spreading among men who have sex with men.

More recently, an outbreak caused by Clade I has led to nearly **14,000 cases and 450 deaths in the Democratic Republic of the Congo (DRC)**. It is important to note that **Clade I is associated with more severe clinical symptoms and higher mortality compared to Clade II**. Cases of this clade have been confirmed in several African countries, and as of August 15th, a case (Clade Ib) was reported in Europe by the Swedish Public Health Agency. The true scale of these outbreaks could be larger than reported due to under-ascertainment and under-reporting.

- ▶ **Prevention** practices that were effective during the 2022 outbreak may help contain the spread of this more severe clade. Diagnostics play a critical role in halting the outbreak and eliminating human-to-human transmission of mpox. The preferred laboratory test for mpox is the detection of viral DNA by polymerase chain reaction (PCR).

Given the current context, molecular tests capable of detecting both Clade I and Clade II are essential.



**Figure 1.** Phylogenetic tree of Clade I, IIa, and IIb and the geographic distributions of the Clades from 1970 to 2024

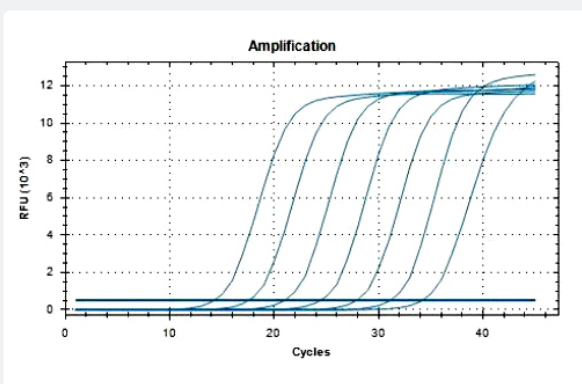
## Monkeypox Virus

**VIASURE Monkeypox virus Real Time PCR Detection Kit** is a real-time PCR test designed for the qualitative identification of DNA from Monkeypox virus in lesion swabs from individuals suspected of Monkeypox virus infection by their healthcare professional (HCP).

This test is intended to be used as an aid in the diagnosis of Monkeypox virus infection in combination with clinical and epidemiological risk factors.

### ► Analytical sensitivity

**VIASURE Monkeypox virus Real Time PCR Detection Kit** has a detection limit of 8 DNA copies per reaction for Monkeypox virus in lesion swabs, with a positive rate of 95%.



**Figure 2.**

Dilution series of **Monkeypox virus** ( $10^7$ - $10^1$  copies/rxn) template run on the CFX96™ Real-Time PCR Detection System (Bio-Rad) (channel FAM).

### ► Analytical reactivity

*In silico* studies have verified that the **VIASURE Monkeypox Virus Real Time PCR Detection Kit** detects the **Clade I (included Ia, Ib) and II (included IIa and IIb)** of Monkeypox Virus.

### ► References - VIASURE Monkeypox Virus Real Time PCR Detection Kit

1 x 8-well strips, low profile . . . . . VS-MPX101L  
 6 x 8-well strips, low profile . . . . . VS-MPX106L  
 12 x 8-well strips, low profile . . . . . VS-MPX112L  
 96-well plate, low profile . . . . . VS-MPX113L  
 2 x 4-well strips, Rotor-Gene® . . . . . VS-MPX101  
 9 x 4-well strips, Rotor-Gene® . . . . . VS-MPX136  
 18 x 4-well strips, Rotor-Gene® . . . . . VS-MPX172

1 x 8-well strips, high profile . . . . . VS-MPX101H  
 6 x 8-well strips, high profile . . . . . VS-MPX106H  
 12 x 8-well strips, high profile . . . . . VS-MPX112H  
 96-well plate, high profile . . . . . VS-MPX113H  
 4 tubes x 24 reactions . . . . . VS-MPX196T

*For more information and use procedure, read the instructions for use included in this product.*