BioFlux

Bioer Technology

Influenza A Virus/Influenza B Virus Nucleic Acid Detection Kit (Fluorescence RT-PCR)

Influenza is an acute respiratory infection caused by influenza virus. At present, the influenza viruses that infect humans are mainly influenza A and B viruses. Both are infectious and harmful, and their clinical symptoms are similar after infection.The kit can be used to detect two kinds of influenza virus nucleic acid in one test, and has the features of short time, good specificity and high sensitivity. In addition, the kit add a human internal reference to monitor the entire process of sample collection, transportation, nucleic acid extraction and PCR amplification to ensure the effectiveness of the experiment.The kit can be applied to Bioer's Fluorescence Quantitative Detection System, LineGene 9600 Plus (FQD-96A) and QuantGene 9600（FQD-96C）. The instrument should contain at least three channels of FAM, HEX (VIC/JOE) and CY5.

Product features

Strong applicability

suitable for pharyngeal swabs

High sensitivity

reagent detection sensitivity up to 200 copies/mL.

Strong specificity

no cross-reaction with a variety of common respiratory tract infection pathogens such as meningococci, Haemophilus influenzae, etc. Endogenous inhibitors (blood, mucin, nasal secretions, etc.) and exogenous inhibitors (dexamethasone, budesonide, etc.) in the samples had no significant effect on the test results.

High accuracy

The kit can simultaneously detect influenza A virus subtypes: A H1N1, A H1N1 (2009), A H3N2, A H5N1, A H7N9; influenza B virus: Victoria strain and Yamagata strain. The positive and negative coincidence rates were 100% and 100% respectively.

Simple operation

one-step method to complete RT-qPCR, fully closed tube amplification and detection to prevent aerosol pollution. The detection can be completed within 35 min.

Specifications

Parameters	Description
Sample Type	Pharyngeal swabs
Sensitivity	200 copies/mL
Accuracy	CV＜5%
Detection Ability	Qualitative detection and differentiation of Influenza A Virus and Influenza B Virus RNA
Support Instrument	Bioer's Fluorescence Quantitative Detection System, LineGene 9600 Plus (FQD-96A) and QuantGene 9600（FQD-96C）
Detection Time	35min
Storage Condition	-25℃ ~ -15℃ away from light,

Application Case

Case 1

Samples with 10-fold gradient of each subtype of influenza A virus and influenza B virus were extracted with MagaBio plus Virus DNA /RNA Purification Kit III and then tested with this kit to verify their performance and linear relationship.

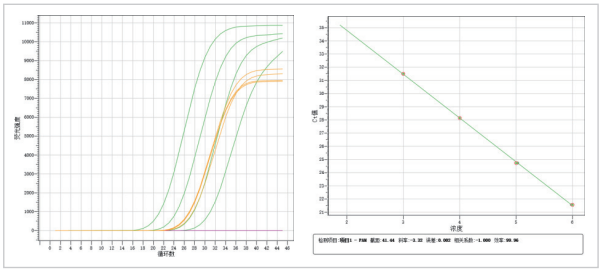

Figure 1. Amplification curve and standard curve of influenza A (H1N1) samples

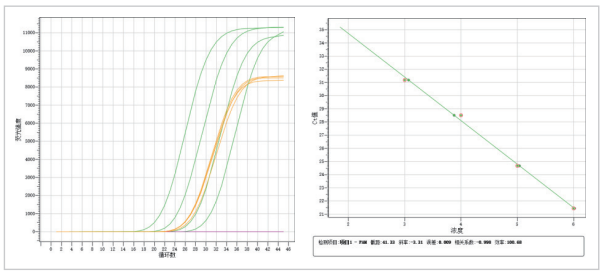

Figure 2. Amplification curve and standard curve of Influenza A Virus H1N1 (2009)

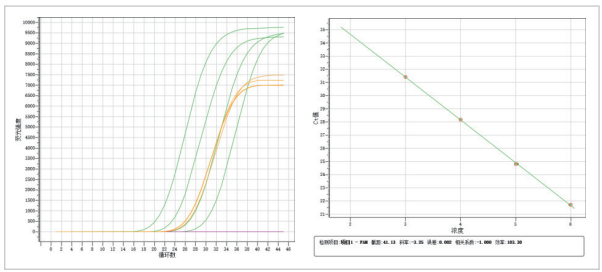

Figure 3. Amplification curve and standard curve of influenza A H3N2 virus samples

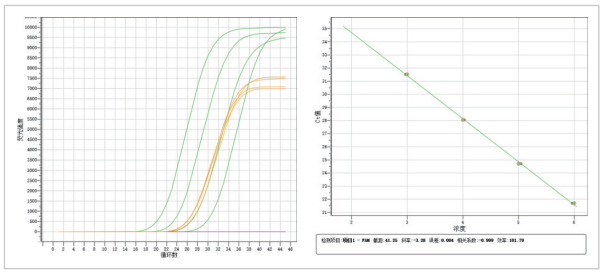

Figure 4. Amplification curve and standard curve of influenza A virus H5N1 samples

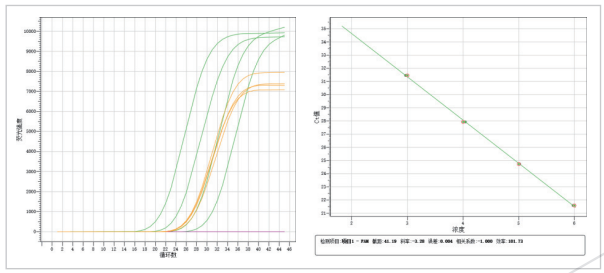

Figure 5. Amplification curve and standard curve of influenza A virus H7N9 samples

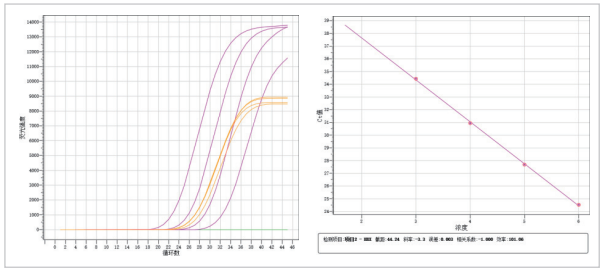

Figure 6. Amplification curve and standard curve of influenza B virus Victoria strain samples

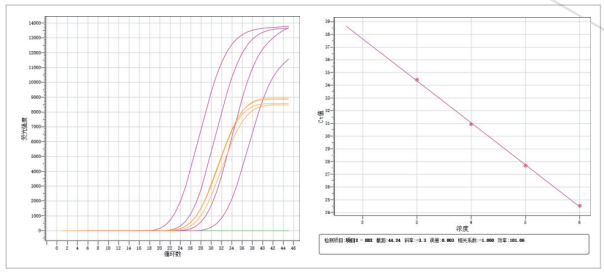

Figure 7. Amplification curve and standard curve of influenza B virus Yamagata strain samples

Result:the correlation coefficients of each subtype of influenza A and INFLUENZA B virus were above 0.995, and the amplification curve was in a typical "S" shape, and the linear relationship of the standard curve was good.

Case 2

Clinical samples of influenza A virus and influenza B virus were extracted with MagaBio plus Virus DNA /RNA Purification Kit III and tested with this kit. At the same time, compared with competing brand reagents, to verify the performance.

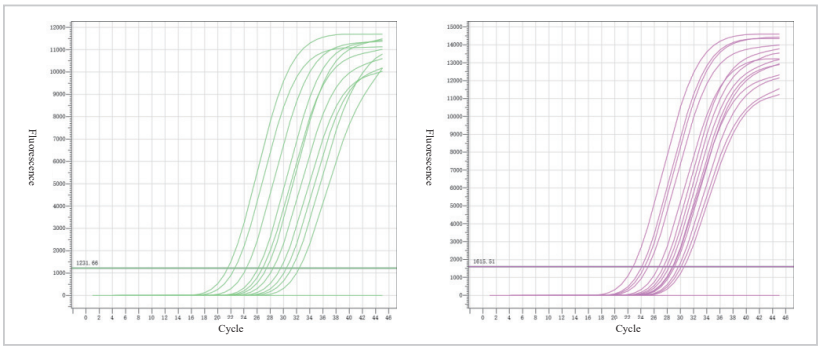

Figure 8 Clinical specimens tested with the Bioer Influenza A Virus/Influenza B Virus Nucleic Acid Detection Kit (Fluorescence RT-PCR)

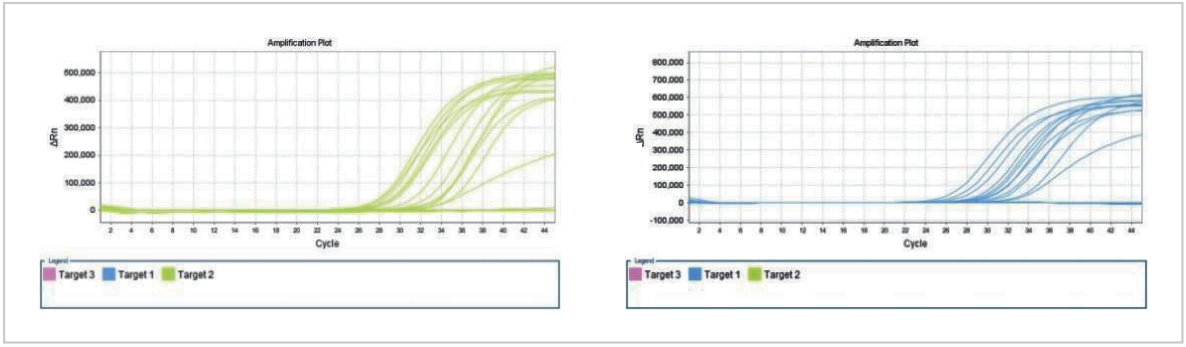

Figure 9 Clinical specimens tested with competing brand reagents

The results showed that compared with competing brand reagents, the clinical samples tested by Bioer Influenza A Virus/Influenza B Virus Nucleic Acid Detection Kit (Fluorescence RT-PCR) had higher detection coincidence rate and higher amplification efficiency.

Ordering Information

Product Name	Cat No.	Package	Note
Influenza A Virus/Influenza B Virus Nucleic Acid Detection Kit (Fluorescence RT-PCR)	BSJ04S1	32T	The kit can be stored for 3 days at 2-8 °C after opening
	BSJ04M1	48T	

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