TIAN LONG

Human Immunodeficiency Virus I (HIV-1) Nucleic Acid Detection Kit

(Real-time RT-PCR Method)

Tianlong Human Immunodeficiency Virus I (HIV-1) Nucleic Acid Detection Kit is used for the quantitative detection of human immunodeficiency virus nucleic acid type I (HIV-1 RNA) in human serum or plasma samples.

It is intended for use in conjunction with clinical presentation and other laboratory markers of disease progress for the clinical management of HIV-1 infected patients. The test can be used to assess patient prognosis by measuring the baseline HIV-1 RNA level or to monitor the effects of antiretroviral therapy by measuring changes in serum or plasma HIV-1 RNA levels during antiretroviral treatment.

The kit is not intended for use as a screening test for the presence of HIV-1 in blood or blood products or as a diagnostic test to confirm the presence of HIV-1 infection.

SUBTYPES OF HIV

The majority of HIV infections are caused by HIV-1

HIV-1 is the predominant strain of HIV in the world today. It is easier to transmit and more capable of causing rapid disease progression than HIV-2.

Species	Virulence	Infectivity	Prevalence	Inferred origin
HIV-1	High	High	Global	Common chimpanzee
HIV-2	Lower	Low	West Africa	Sooty mangabey

More than 90% of HIV-1 cases involve HIV-1 group M

HIV-1 viruses can be further divided into groups M, N, O and P. The HIV-1 group M viruses predominate and are responsible for the AIDS pandemic.

FEATURES

Reliable Detection

Detection of HIV-1 group M (A、B、C、D、AE、F、G、AG-GH), N and O with high sensitivity

Internal Standard Quantification

Maximum avoiding amplification differences in wells and ensuring high repeatability;
No need for standard curves for each experiment thus avoiding reagent waste

Accurate HIV Viral Load Monitoring

Accurate HIV viral load quantification over a broad linear range from 40~1.0×10^8 IU/mL

High Sensitivity

Lower limit of detection is 20IU/mL, limit of quantitation is 40IU/mL

Traceability to the WHO Standard

Precise and fully traceable quantification according to the 4th WHO International Standard for HIV-1 for Nucleic Acid Amplification Techniques (NIBSC 16/194)

Optimized Workflow

Compatible with Tianlong extraction kits can make your experiment more accurate and rapid

DATA INTERPRETATION

Figure 1: Gradient concentration HIV-1 amplification curve

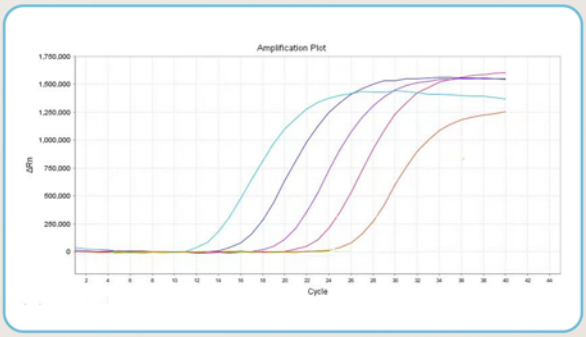
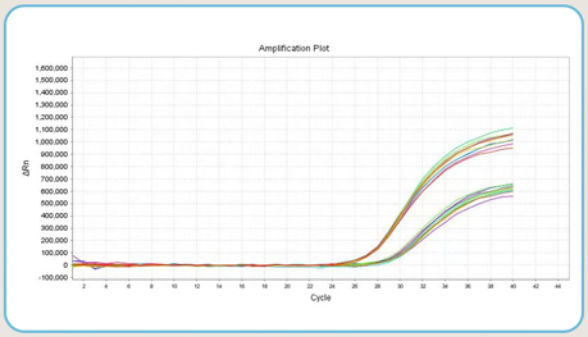


Figure 2: High concentration and low concentration HIV-1 repetitive amplification curve

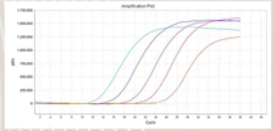


ORDERING INFORMATION

Product Name	Human Immunodeficiency Virus I (HIV-1) Nucleic Acid Detection Kit (RT-PCR Method)	
Cat.No	P354H	P908H
Specification	24T/kit	48T/kit
Specimen	human serum or plasma samples	
Linear Range	40~1.0×10^8 IU/mL	
Linearity	| r | ≥0.980	
Sensitivity	Lower limit of detection is 20IU/mL, limit of quantitation is 40IU/mL	
Precision	CV≤5%	
Storage & Validity	-25℃ ~-15℃ for 12 months	
Applicable Equipment	Instruments with 4 fluorescence channels such as Tianlong Gentier Real-time PCR systems,, ABI7500, ABI QuantStudioTM 5、Bio-Rad CFX96	

ASSAY WORKFLOW

1 Sample Collection → **2** Nucleic Acid Extraction → **3** PCR Detection → **4** Analysis and Report



Bring Technology to Life

Version 2.0

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