

## STRP<sup>™</sup> HIV-1 Detection Kit



#### Components

Contents	Amounts
HIV PCR Mix I	240µl
HIV PCR Mix II	290µl
Positive DNA Control	25µl
DEPC Treated Water	1ml

#### Description

This kit is designed for qualitative detection of HIV-1 RNA in the serum and plasma of Human blood by the method of Single tube RT reaction, followed by nested PCR.

#### A. RNA Extraction

You can use SinaClon Viral Extraction Kit (DNA & RNA Virus Extraction, Cat No.: EX6065)

#### B. Single tube cDNA Synthesis and first PCR Round

Label PCR tubes for cDNA synthesis & first PCR, for test, positive and negative control.

- 1. Add 12µl One Step PCR Mix I for each tube on ice (Mix & spin before use):
- 2. Close reaction tubes or place tray and reaction tubes in a resealable plastic bag and seal the bag securely, do not close reaction tubes at this time. Transfer tubes to Pre-Amplification 1 Area.
- 3. Place RNA tube at 95°C, 1 min. and then place on ice.
- 4. Add 5-8  $\mu$ l RNA to each patient tube and 4 $\mu$ l Positive control to pos. tube and DEPC-Water to neg. tube. (The final volume of each reaction will be 20 $\mu$ l)
- 5. Close tubes, spin the mixture on microfuge 3-5 sec. and transfer the tubes to preheated thermocycler and start the program:

Cycling parameters		
50°C- 20 min 94°C - 2 min 62°C - 40 sec 72°C - 40 sec <b>1 cycle</b>	Than	93°C-40 Sec 62°C- 40 Sec 72°C -40 Sec <b>20 cycles</b>

Cycling parameters may need to be setup with some Thermocyclers.



#### C. Second PCR Round

1. Add the following to PCR new reaction tube:

**HIV PCR Mix II DNase free Water/DEPC Water** 

14.5 ul 5.5 µl

- 2. Close reaction tubes or place tray and reaction tubes in a resealable plastic bag and seal the bag securely, do not close reaction tubes at this time. Transfer tubes to Pre-Amplification 1 Area.
- 3. Add PCR product from first round 5 µl. (The final volume of each reaction tube will be  $25 \mu$ l)
- 4. Transfer the tubes to preheated thermocycler and start the program:

Cycling parameters	
93°C - 40 sec	
62°C - 40 sec	
72°C - 40 sec	
35 cycles	

### **D. Result Analysis**

Analyze amplified fragments by loading of 10 µl PCR product in 2% agarose gel directly without adding loading buffer. The presence of 174 bp fragments indicates positive test. In smear result without specific fragment (174 bp), repeat the step B, C & D with 1/10 dilution of RNA (e.g. 10µl of RNA in 100µl of DEPC Treated water).

# Signs

Signs	Definitions
-20	Temperature range on product use
	Product end of life detection information
RUO	For Research Use Only
	Name and address of the manufacturer of the product
REF	Product technical code
Ŷ	Product shipping conditions



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