Blood Direct PCR Kit (To Remove Red Blood Cells)

Cat No.: PC1190

Package: 50T/ 100T

Storage: -20℃ Store, valid for 1 year.

Kit content:

Component	50T	100T	Storage
Solution A	25mL	50mL	-20℃
Solution B	3mL	6mL	-20℃
Solution C	200μL	400μL	-20℃
dNTPs	100μL	200μL	-20℃
10X PCR Buffer	500μL	1000μL	-20℃
DNA Polymerase	60μL	120μL	-20℃
Instruction	1 份	1 份	

Product Description:

By direct PCR kit, the lysis products treated with reagent A and reagent B can be used as PCR template without the extraction of genomic DNA from blood.

Product features:

1. The required sample size is minimal
2. No high quality template can perform PCR reaction, saving time and cost, wide applicability and other advantages.

Operation steps (for reference only):

1. Mix 50μL of whole blood in a 1.5ml centrifuge tube with 150μL of reagent A, gently vortexed or reversed, and stand at room temperature for 10min.
2. 13000rpm, centrifuged for 1min, the pipette carefully absorbed and supernatant discarded.
3. 150μL of reagent A was added to the precipitate, gently blown up, centrifuged at 13000rpm for 1min, the pipette was carefully absorbed and the supernatant was discarded.
4. Repeat step 3.
5. 49 uL reagent B and 1μL reagent C were added to the precipitate and mixed repeatedly with a pipette suction head.
6. The above liquid was heated at 55℃ for 15min and at 95℃ for 5min. At 12000rpm, was centrifuged for 1min, and the supernatant was the DNA template for the PCR reaction system.

PCR reaction system:

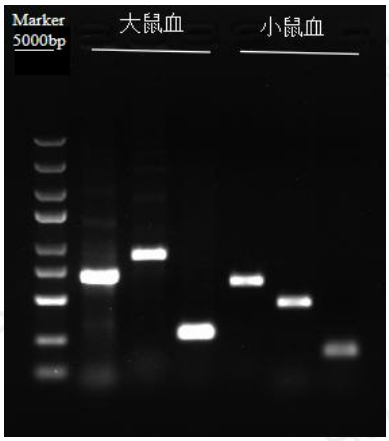
Reaction components	25μL
Templet	2μL

10X PCR Buffer	2.5μL
dNTPs	0.5μL
Forward Primer (10μM)	1μL
Reverse Primer (10μM)	1μL
DNA Polymerase	1μL
Water	Make-up to 25μL

PCR reaction condition:

Cycle Steps	Temperature	Time	Cycle
Pre-denaturation	94℃	5min	1
Denaturation	94℃	15s	30
Annealing	56℃	30s	
Extension	72℃	1min/kb	
Final Extension	72℃	3min	1
Keep Warm	4℃	-	

Experimental Result:



Electrophoresis diagram after direct PCR of rat/ mouse blood (three primer pairs)
M：Marker

Note:

1. Take fresh blood to place overnight, the effect will be better than fresh.
2. Each prepared template is best to be used and made now.
3. Store the prepared reagent C in-20℃.
4. If the sample protein content is high, the use of reagent C can be increased appropriately, and it is recommended not to exceed 4ul / sample.
5. During the red blood cell removal process, try to lysis the red blood cell thoroughly, and if the template is finally colored red, it may affect the PCR effect.
6. If the sample is a blood sample with removed red blood cells (all white blood cells), step 5 and subsequent experimental operations can be performed directly.