V02

# 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.



Tel: 400-968-6088 https://www.solarbio.com E-mail: sales-china@solarbio.com
Address: No. 85, Liandong U Valley, Middle Zone, 101102, Tongzhou Dist, Beijing, China

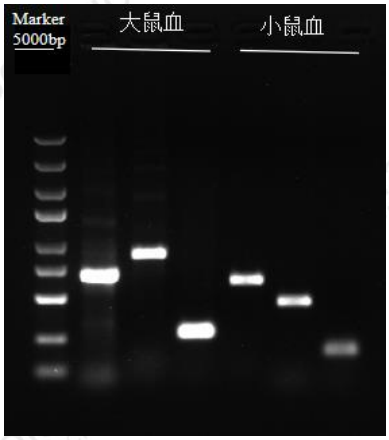
**PCR reaction system:**

| | |
|---|---|
| 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.