

## DNA extraction from whole blood

- Comparison with other companies' purification kit -

OStandard protocol (Sample: 2µI)

OScale up protocol (Sample: 50µl)

Reagents preparation
Mix the CellEase A and B (10µl CellEase A, 10µl CellEase B).

Reagents preparation
Mix the CellEase A and B (250µl CellEase A, 250µl CellEase B).



Preparation of test samples 2µl of whole blood (EDTA) was transferred to the tube.

Preparation of test samples 50µl of whole blood (EDTA) was transferred to the tube.



Add 20µl of the CellEase mixture to the sample (2µl) and stir them gently.



Add 500µl of the CellEase mixture to the sample (50µl) and stir them gently.

Add 250µl of CellEase C to the test sample

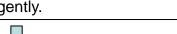


Incubate at 72°C for 6 minutes. Then incubate at 94°C for 3minutes.





Add 10µl of CellEase C to the test sample and stir them gently.







Transfer 5ul of extracts to PCR reaction mixture and amplify the target DNA fragment.

PCR

5.0 µl Test sample

5.0  $\mu$ l ×10 buffer (+Mg<sub>2+</sub>)

5.0 µl dNTPs

1.0 µl Forward Primer (10pmol/µl)

1.0 µl Reverse Primer (10pmol/µl)

0.5  $\mu$ l Ex Taq (5 U/ $\mu$ l)

PCR Cycle

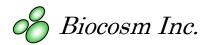
94°C 1min

94°C 30sec
55°C 30sec
72°C 60sec
72°C 4min

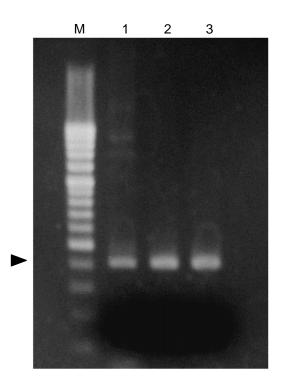
35 Cycles

Fill up to 50ul by distilled water

Primer: β-globin (human) Primer (408bp)



## <Test results>



|   |                              | Sample (µI) | Extract (µI) | Put into PCR (µI) |
|---|------------------------------|-------------|--------------|-------------------|
| М | Marker (100bp ladder)        |             |              |                   |
| 1 | Spin column purification kit | 50          | 200          | 5                 |
|   | (Company Q)                  |             |              |                   |
| 2 | CellEase Blood               | 2           | 32           | 5                 |
|   | (Standard protocol)          |             |              |                   |
| 3 | CellEase Blood               | 50          | 800          | 5                 |
|   | (Scale up protocol)          |             |              |                   |



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