

DNA Isolation from FTA Blood

DNA extraction from blood FTA using *prepGEM*[™]

The following method is recommended for DNA extraction from FTA cards impregnated with blood. The method below can be run in a 96 well format or in PCR tubes and a thermal cycler.

This method is intended to be a starting point for evaluating *prepGEM*[™]. The method should be optimised for the specific requirements of the test type.

Extraction Method

1. Add 2 x 2 mm blood FTA punches to each well of a microplate [NOTE1].
2. Add 100 μ l H₂O and leave at room temperature for 15 min [NOTE2].
3. Decant the water and add 70 μ l of *prepGEM*[™] buffer 3H and 1 μ l of *prepGEM*[™].
4. Incubate at 70 °C for 15 minutes, then 95-99°C for 5 minutes [NOTE3].
5. Centrifuge at 5,000 rpm for 5 minutes [NOTE3].

NOTE1: Larger punch sizes or more punches can be used with the same method. The yield will be proportionately higher.

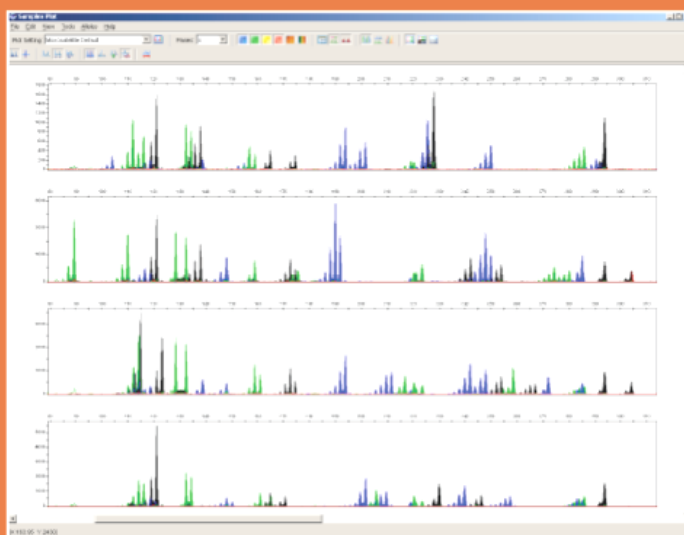
NOTE2: A 10x buffer is supplied. *prepGEM*[™] and buffer can also be added as a master mix. This method works well for multiplexed livestock micro-satellites, with or without the wash step, but needs to be optimised for your specific application.

NOTE3: 5 minutes is sufficient as long as ramping to temperature is rapid. For slow ramping, longer incubations can be used. Final centrifugation may be optional, depending on optimisation for specific tests.

BLOOD FTA

Typical Results

15-plex sheep panel. 2 x 2mm² punches of FTA paper; 70 μ l of *prepGEM*[™] buffer, and 2 μ l of *prepGEM*[™]. The microplate was centrifuged at 5,000 rpm for 5 minutes. 2 μ l of the extract was used for a 6 μ l PCR.



prepGEM[™] delivers excellent results from high throughput blood FTA punches, simply and rapidly!