



DNA Isolation from Hair Follicles

DNA extraction from human hair follicles using *forensicGEM*[™]

This method is recommended for DNA extraction directly from animal hair follicles. Incubations can be performed either in a thermal cycler, water bath, or using an automated robotic workstation fitted with Peltier temperature-controlled heating blocks.

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

Extraction Method

1. Cut a single hair follicle from a hair shaft using using a sterile irradiated blade and place in the well of a microtitre dish or a thin-walled PCR tube [NOTE1 & 2].
2. To each tissue sample add 98 µl *forensicGEM*[™] buffer 3 and 1 µl of *forensicGEM*[™] [NOTE3].
3. Incubate at 75 °C for 15 minutes.
4. Incubate at 95°C for 15 minutes [NOTE4].
5. 1-2 µl is generally sufficient for a single PCR.

NOTE1: Individual hairs can be attached to the adhesive strip of 3M[™] Post-It[®] notes, and cut off follicle using a sterile blade. The hair follicle can be picked up using a statically-charged, sterile pipette tip by rubbing the tip on the non-adhesive section of the Post-It[®] note.

NOTE2: Make sure that the follicles are in the solution. To prevent problems with static, it may be useful to apportion the buffer into the wells before adding the follicles.

NOTE3: 10 x Buffer is supplied. *forensicGEM*[™] and buffer can also be added as a master mix.

NOTE4: 15 min. incubation time may be reduced further through optimisation.