PROTOCOL FOR COLLECTION OF HAIR SAMPLES FOR GENETIC TESTING

Background

DNA is contained in the root of the hair, not in the shaft itself. It is therefore essential that the hair roots (which are clearly visible as bulbous protrusions) are attached to the plucked hairs submitted for DNA analysis.

SHORT, FINE BODY HAIRS ARE NOT SUITABLE FOR DNA ANALYSIS.

Collect long, thick hairs from the switch/brush of the tail.



Sample

It is important that hairs submitted for DNA analysis are <u>clean and dry</u>. Moisture, combined with faecal contamination, which is difficult to avoid in some instances, degrades the DNA, impacting on our ability to obtain a result. If moisture cannot be avoided, transfer the hairs to a freezer ASAP to inhibit bacterial and fungal growth.

Sampling procedure



- Select 10-20 tail hairs and tie a knot in mid shaft. Wrap the knotted hairs around your finger, and pluck with a rapid, sharp motion. Repeat the procedure to obtain about 20 to 30 hairs.
- 2. The hooked or bulbous hair roots plucked from under the skin should be clearly visible.



3. If the samples are contaminated with faeces trim the distal end beyond the knot (opposite end to the bulbs). Place the knotted hairs in a snap-lock plastic bag, which should be labelled with the unique identity of the subject from which the sample was collected. It is this identity that will appear on the report.



IF BOTH DNA PARENTAGE ANALYSIS AND GENETIC DISEASE TESTING IS REQUIRED PLEASE SUBMIT TWO SEPARATE BAGS, EACH CONTAINING ABOUT 20 – 30 HAIR ROOTS.