

This guide has been prepared to assist you collect hair samples for genetic testing. Refer to the NSW DPI website for current information on sample submission.

## Background

The hair root is among the most preferred samples for genetic testing because it is cost efficient to collect, send and process.

It is important that hairs submitted for DNA analysis are clean and dry. 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 necessary, wash dirty tails or hair samples and dry prior to sending samples to the laboratory. If moisture cannot be avoided, transfer the hairs to a freezer ASAP to inhibit bacterial and fungal growth.

## Collection instructions

### Cattle and horses

1. Select 10-20 tail hairs from the switch/brush of the tail.
2. Tie a knot in mid shaft (Figure 1). Wrap the knotted hairs around your finger, and pluck with a rapid, sharp motion. Repeat the above two steps to obtain approximately 30-40 hairs.
3. The hooked or bulbous hair roots plucked from under the skin should be clearly visible (Figure 2).
4. If the samples are contaminated with faeces, trim the distal end beyond the knot (opposite end to the bulbs). Place knotted hairs in an envelope, 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.

Figure 1: Mid shaft knot in tail hairs to be collected.



Figure 2: Hair roots visible on plucked tail hairs



### Overseas submissions

Hair samples originating from countries other than Australia must be heat-treated at 70°C for 15 minutes prior to dispatch. Overseas submission must have the following documentation presented on the outside of the package (eg. In a zip-lock plastic bag) ready for quarantine inspection:

- A copy of the current Australian Government Department of Agriculture and Water Resources (DAWR) import permit.
- A declaration indicating the samples were heat-treated as required.

Please contact the laboratory to receive copies of the current importation documents.

## Contact Us

For assistance or further information contact Customer Service.

Business hours:	8:30am – 5:00pm Monday – Friday (excluding public holidays)
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