

Standard for Collection of Known DNA Samples from Domestic Mammals



WHAT IS AN AAFS STANDARD FACTSHEET?

The AAFS produces clear, concise, and easy-to-understand factsheets to summarize the contents of technical and professional forensic science standards on the OSAC Registry. They are not intended to provide an interpretation for any portion of a published standard.

WHAT IS THE PURPOSE OF THIS STANDARD?

This standard provides a protocol for obtaining genetic known evidence samples (i.e., buccal swabs and pulled hair) for the purpose of genetic analysis from domestic animals such as dogs, cats, or livestock.

This standard does not address sampling of non-domestic animals.

WHY IS THIS STANDARD IMPORTANT? WHAT ARE ITS BENEFITS?

This standard contains requirements that support the collection of known/reference samples in a manner that optimizes the quantity and quality of the DNA present and protects the integrity of each sample. A high-quality reference/known sample is needed to maximize the utility in investigations and legal proceedings.



HOW IS THIS STANDARD USED, AND WHAT ARE THE KEY ELEMENTS?

This standard is to be used by personnel collecting buccal swabs and pulled hair reference samples (knowns) from dogs, cats, or livestock.

General requirements include assigning a unique name or number, recording collection information, and beginning the chain of custody for each known sample collected.

Specific protocols for the collection of buccal swabs from companion animals, such as dogs and cats, and pulled hairs from livestock species are included in this standard, as well as protocols for sampling from more than one animal.

The buccal swab protocol requirements cover how to handle the isolation of the animal from other animals, the time period of abstaining from food and water prior to sampling, the mechanism for collecting the buccal swabs, and the handling of the swabs while drying prior to packaging.

The pulled hair protocol requirements cover the appropriate locations for collection, how to handle dirt or debris if present, and the mechanism for pulling the required number of hairs.

