Information Guide

DNA Profiling and Parentage Analysis Services

www.thekennelclub.org.uk
The DNA Profile of your dog is the ultimate in individual identification and offers a ‘tamper-proof’ means of identity.
DNA Profiling and Parentage Analysis Services

The Kennel Club offers a DNA Profiling Service as well as a DNA Parentage Analysis Service, both are available for any breed or crossbreed.

What is DNA Profiling?

Each dog has a unique DNA signature that we call its DNA profile or fingerprint, which can be likened to a biological microchip because each DNA profile is unique to an individual dog. The DNA profile can therefore be used to uniquely identify a particular dog. Unlike the microchip, however, the DNA profile can provide more information than this. Since a dog inherits half of its DNA from its dam and the other from its sire, this means that half of a dog’s DNA profile is inherited from its dam and the other half from its sire. Therefore we can also use a dog’s DNA profile to verify that its registered parents are in fact its biological parents, provided DNA profiles are available from both parents.

Thus a DNA profile can be used to identify an individual dog for life and that profile can also be compared to its parents’ profiles to verify parentage.

How do I get my dog DNA profiled?

You need to complete and submit a short DNA Profile Kit Request Form available from the Kennel Club Health and Breeder Services Department or from the website at www.thekennelclub.org.uk or email us at info@thekennelclub.org.uk.

Once we receive your request, a sampling kit, with clear instructions, is despatched immediately and should take no more than a couple of days to reach you. You then sample your dog at a convenient time for you and return the sample, in the envelope provided, to our laboratory.
How much does it cost and how long does it take?

A DNA profile costs £25 per dog and on average it takes about four weeks until you receive a certificate of DNA profiling from the Kennel Club.

What is involved – do I need to get my vet to do anything?

A simple mouth swab is all that is required. With the clean swab (resembling an extended ear-bud) that you receive from us, you collect loose cheek cells from the inside of your dog’s mouth by rubbing the swab against the gum or inner cheek. The swab is then returned to our laboratory, in the pre-addressed envelope for processing. Your vet does not need to be involved in this process.

Once the laboratory receives your swab, the DNA is extracted from any cells that have been wiped onto the swab from your dog’s mouth and a profile is constructed for him or her.

Is a blood sample required?

Usually not, however, in a very small number of cases (less than 5%), sufficient DNA cannot be extracted from the cheek cells collected on the mouth swabs and an owner is asked to submit a blood sample from the dog. (Blood contains a great deal of DNA and a successful profile is virtually certain from a blood sample.) You would need to ask your vet to extract a few millilitres of blood from your dog if this is the case.
Does a DNA profile give information on disease status?
DNA profiles do not currently give any information on disease status of a dog. DNA testing for specific diseases is done entirely separately to DNA profiling. If, in the future, disease markers were incorporated into profiles, then it is likely that the current profile format would change significantly to accommodate this.

So what are the reasons for DNA profiling my dog?
A DNA profile is a unique form of identification that is extremely unlikely to ever be altered, lost or malfunction during the course of a dog’s life. (There is a tiny possibility that mutation could alter a dog’s profile, but this is considered extremely unlikely.)

As profiles cannot currently be produced instantaneously, it would be ideal to complement a DNA profile with another instant form of permanent identification such as microchipping.

DNA profiles can be used to verify the parentage of a dog. Each dog must have half of its sire’s DNA and half of its dam’s DNA.

How does the parentage analysis service work?
A Request for DNA Parentage Analysis Form must be submitted (available as above for DNA Profiling Request Form).

How much does it cost and how long does it take?
Once all dogs involved in the parentage case have been DNA profiled, the analysis to verify parentage costs £25.
Additional guides on a wide range of subjects are also available to download from our website at www.doginformation.org.uk:

- Asthma and your dog
- Breeding from your bitch
- Choosing and bringing home the right dog for you
- Do you know dog law?
- Do you know how to look after your dog in its senior years?
- Do you know what to do if you lose your dog or find a stray?
- Find a rescue dog
- Health screening and the Kennel Club
- How to breed dogs using artificial insemination
- How to get involved in fun activities and competitions with your dog
- How to get started with dog training
- How to register your dog with the Kennel Club
- Kennel Club endorsements
- Moving house with your dog
- Road travel with your dog
- So you are thinking of working with dogs?
- Thinking of showing your dog in the UK?
- Thinking of using your dog as a stud?
- Travelling abroad with your dog