



DNA test for the **Familial Nephropathy** in English Cocker Spaniel

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The familial nephropathy, a renal disease

Familial nephropathy (FN) is a juvenile-onset fatal kidney failure in the English Cocker Spaniel. Dogs with FN typically develop chronic renal failure between 6 months and 2 years of age. The rate of disease progression observed in affected dogs is more rapid in some individuals than in others, but the disease is ultimately fatal.

The early clinical signs are excessive water consumption, excessive urine volume, reduced growth rate or weight loss, poor quality hair coat, reduced appetit, vomiting.

The familial nephropathy, a hereditary disease

Familial nephropathy (FN) is inherited in an autosomal recessive pattern in the English Cocker Spaniel.

DNA test results	The dog is	Genetic status	Will develop the disease ?	Will transmit a defective copy of FN gene to its progeny ?
Normal homozygous	Clear	2 normal copies of FN gene	NO	NO
Heterozygous	Carrier	1 normal copy and 1 defective copy of FN gene	NO	YES statistically to 50% of its progeny
Mutated homozygous	Affected	2 defective copies of FN gene	YES	YES to 100% of its progeny

This DNA test allows precocious diagnosis of the familial nephropathy, before manifestation of the first clinical signs. As this disease is often fatal before 2 years of age, we recommend consultation of affected pups with a veterinarian specialized in renal diseases to follow the progression of the disease.

Using this DNA test, breeders are able to detect very early carrier dogs, to select breeding animals and to adapt breeding strategies in order to avoid producing and selling pups affected by Familial Nephropathy. Thanks to this test, breeders avoid equally to spread the genetic defect in their lines or in the breed.

For more informations about the familial nephropathy and recommendation on breeding strategies, please consult www.antagene.com

The FN DNA-test, a reliable and validated test

The test has been validated on american and european population of English Cocker Spaniel. The exact frequency of carriers in european population is not known as yet. Populational studies led by ANTAGENE through genetic testing will provide this information.

The test is reliable, easy to do from a cheek swab sampling (cytobrush), can be done at any age even in young pups and is done only one time in life of the animal.

Identification of the FN gene and mutation in English Cocker Spaniel resulted from research led by the team of Pr Keith Murphy at Texas A&M University. The technology underlying this test is patented by MERLOGEN LLC. ANTAGENE has an exclusive license to provide the FN test in Europe.

For owners in USA and Canada : www.optigen.com

For owners in Australia, New-Zealand, Japan and China : www.geneticsscience.com

Ordering

Request by email sampling kits which are sent by postal mail. Sample is realized and authenticated by a veterinarian in order to deliver a genetic certificate. Samples are sent to ANTAGENE.

For more informations on our services and researchs on dog and cat, please consult our web site : www.antagene.com