



DNA test for the
Familial Nephropathy
in English Cocker Spaniel

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 appetite, 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 the Familial Nephropathy. Thanks to this test, breeders avoid equally to spread the genetic defect in their lines or in the breed.

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 carrier frequency in European population is 14%.

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.geneticscienceservices.com

Ordering

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

For more information on our services and researches on dogs and cats, please consult our web site: www.antagene.com