



DNA testing for the Feline Polycystic Kidney Disease (PKD)

The Polycystic Kidney disease, a renal disease

Polycystic Kidney disease (usually called PKD) is a frequent genetic disease concerning various breeds of cat, notably Persian and Persian related breeds. This affection results in a progressive development of cysts in kidneys, causing destruction of renal tissue, and renal insufficiency, being able to cause the untimely death of the animal. The renal dysfunction appears between 2 to 10 years, according to the rate of growth of the renal cysts.

The PKD, an inherited disorder

The PKD is inherited as an autosomal recessive trait in the Persian and Persian related breeds. The DNA test supplies an answer among three possible situations:

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

The laboratory ANTAGENE developed a DNA test reliable as soon as the kitten is born, with a simple oral smear and with reliability higher than 99%.

The early PKD tracking (before developing clinical signs) makes it possible to adapt its food and to possibly apply certain preventive treatments in order to delay and to limit the development of the renal insufficiency.

Early tracking also permits to select the reproducers, to adapt the crossings in order to avoid producing kittens affected in the descent and propagating the disease in the breed PKD.

The PKD test, a reliable and validated test

Frequency of the genetic anomaly has been estimated for four races: Persian (26%), Exotic Shorthair (37%), British Shorthair (12%), Maine Coon (1%), but still remains unknown for the other breeds of cats.

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

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