

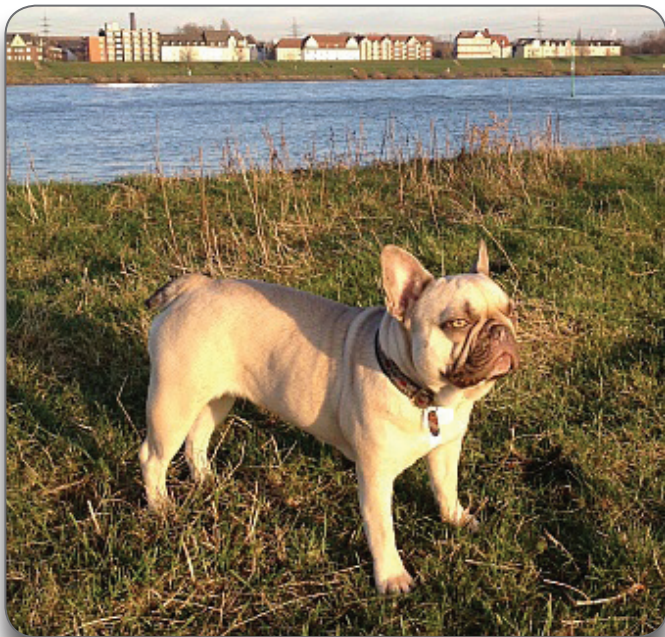
# GENETIC

---

## news

---

### B locus – News about the well known



The B locus determines brown coat colour in many breeds. There are two alleles at the B locus: the dominant B is responsible for the base colour, black, while the recessive b gives rise to a brown coat colour. If one only considers the B locus, a B / B-dog and B / b-dog is black and a b / b-dog brown. In red or golden dogs b has no effect on the coat colour, however, the colour of the nose and footpads does change from black to brown when homozygous b (b / b) genes are present. In recent years, it has been shown that the B locus possesses some special features: currently, there are three different genetic variants that are known to produce the same phenotype (namely the brown coat colour). Normally, not all three variants can be found in one breed, rather each breed has its „preferred“ mutation. For example, in Labrador Retrievers a mutation in exon 5 is usually responsible for the brown coat colour. However, if two variants occur in one breed, the situation becomes somewhat more complicated in the carrier animals: if the variant is present heterozygously, one must determine whether the „brown“ variants are on the same chromosome or not. If this is the case, the dog is a black carrier

animal and can pass brown to its offspring. Usually, however, the „brown“ variants are distributed among two chromosomes and a „normal“ black pigment cannot be formed. These dogs are brown and pass 100% of the time the b allele on to their offspring. Since it is impossible to distinguish these two possibilities with a gene test, we are unable to precisely determine the genotypes in these cases.

#### Please help us:

In small dog breeds such as the French Bulldog, the matter is even more complicated. In this breed, it is assumed that there are additional, as yet unknown, variants which are most likely responsible for the brown coat colour. We are, currently, working vigorously on elucidating the inheritance of coat colour in French Bulldogs and finding the missing information that would enable sure prediction of colour inheritance. For this endeavour, we are looking for brown French Bulldogs. Please feel free to contact us regarding this! Contact persons are Mrs. Kehl and Dr. Beitzinger.

### Genetics and more

Since the beginning of this year, LABOKLIN is a recognised testing laboratory for the Finnish Kennel Club. Our LABOKLIN colleague, Dr. Christoph Gerhards, has been working for us in Finland for many years now. Through this recognition by the Finnish Kennel Club, we are now able to offer all our genetic tests to Finnish breeders. We look forward to working with you.



## LABOKLIN on the go - Exhibition dates 2015



Once again, you can find our representatives at numerous trade shows throughout Europe this year. We look forward to meeting you in person!

5th – 8th March	CRUFTS Dog Show, Birmingham
14th – 22th March	Equitana, Essen
21th – 22th March	Eurasia 2015, Moscow
8th – 10th May	Hund & Katz, Dortmund
5th – 7th June	France Championship, Dijon
10th – 14th June	World Dog Show, Milan
2th – 6th September	Americana, Augsburg
4th – 6th September	European Dog Show, Oslo
16th – 18th October	Hund & Pferd, Dortmund
31th October – 1st November	Russia „RKF President Cup“, Moscow
5th – 6th December	Winner Dog Show, Helsinki

## DM - European patent granted

The European Patent for the gene-test which detects the genetic risk factor for degenerative myelopathy in dogs (DM genetic test) was issued to us in January this year. With this, LABOKLIN acquired the sole right to perform this genetic test in Europe. In our laboratory, this test is executed according to Dr. Gary Johnson of the University of Missouri,



who was the first to discover and implement it.

This changes nothing for you. As usual, we perform the test using an EDTA blood sample or a swab from the oral mucosa of the dog. The DM genetic test can be used on every breed of dog. Results are available to you within three and five days after we receive the sample. Even the price for the DM genetic test did not change. In particular, we will continue to offer members of breeding associations the usual breeders discount.

Degenerative myelopathy occurs in older dogs, approximately 8 years of age and older, and leads to lameness starting first in the hind legs. Detailed information about the disease and genetic test we offer can be found on our website at [www.labogen.de](http://www.labogen.de).