

Sample

Sample: 08-12345
Name: Lassie DEMO
Breed: ---
Tattoo number: 1392013
Microchip: 123 456 789 012 345
Reg. number: REGQ12345
Date of birth: 31.12.1909
Sex: female
Date received: 25.11.2008
Sample type: blood
The identity of the animal has been checked.

Customer

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Result: N/FGF5

Explanation

Presence of c.284G>T (M1), c.556_571del16 (M3), c.559_560dupGG (M4), c.578C>T (M5) FGF5 gene variants influencing coat length in dogs was examined.

- If the result is N/N - the dog does not carry any variant specific for long hair - the dog has short hair
- If the result is N/M1 or N/M3 or N/M4 or N/M5 – the dog carries one copy of the gene variant - the dog is short-haired, but it can give birth to long-haired offspring, if suitably crossed.
- If the result is M1/M1 or M3/M3 or M4/M4 or M5/M5 – the dog carries two same variants in the FGF5 gene - the dog is long-haired
- If the result is M1/M3, M1/M4, M1/M5, M3/M4, M3/M5, M4/M5 – the dog is long haired (dog inherited each variant from different parent – compound heterozygote carries two different FGF5 gene variants)

Long coat phenotype is inherited in autosomal recessive trait. Long coated dogs have two FGF5 gene variants in both alleles (each from different parent). In case of mating two FGF5 carriers, theoretically, 25% long coated offspring will be born. In connection with long coat phenotype allelic heterogeneity was observed, dogs may be compound heterozygotes for different variants. In some breeds, variant for long coat phenotype has not been identified yet.

Method: SOP173-FGF5rflp-dog, 172-FGF5, direct DNA sequencing

Report date: 25.11.2008

Responsible person: Mgr. Martina Šafrová, Laboratory Manager

