GENOMIA
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Result certificate #012345

Detection of mutations related to the development of PLN in Airedale Terriers and Soft-Coated Wheaten Terriers

Customer: Jan Novák, Dlouhá 1, 30000 Plzeň, Czech Republic
Sample:
Sample: 21-12345
Date received: 01.02.2021
Sample type: blood

Information provided by the customer
Name: Lassie DEMO
Breed: Plemeno
Tattoo number: 1392013
Microchip: 123 456 789 012 345
Reg. number: REGQ12345
Date of birth: 1.1.2020
Sex: female
Date of sampling: 01.02.2021
The identity of the animal has been checked.

Result: PREVIEW RESULT LINE

Explanation

Presence or absence of mutations c.1877C>G in KIRREL2 gene and c.3067G>A in NPHS1 gene related to the development of Glomerulopathy (Protein Losing Nephropathy, PLN) in Airedale Terriers and Soft-Coated Wheaten Terriers were tested.

Glomerulopathy is a kidney disease that affects the glomeruli. When they are damaged, protein leaks into the urine. Symptoms usually appear after the animal reaches reproductive age. Initial symptoms may include increased drinking and urination, gradual weight loss, loss of energy, vomiting, or diarrhea. Later, edema, fluid in the abdominal cavity, hypoalbuminemia, hypercholesterolemia, and gradual deterioration of kidney function may occur, which can lead to kidney failure. Complications also include high blood pressure and an increased risk of thrombosis.

However, the genetic basis of glomerulopathy is polygenic and complex. The presence of mutations in the KIRREL2 and NPHS1 genes in a homozygous state (P/P) is a risk factor for the development of PLN. Heterozygotes (N/P) are at low risk of developing PLN. N/N individuals are at no risk of developing PLN.

Method: SOP188-MPS-canine, MPS

Date of issue: 06.02.2021
Date of testing: 01.02.2021 - 06.02.2021
Approved by: Mgr. Martina Šafrová, Laboratory Manager

verified and certified document GENOMIA genetic laboratory

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