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Result certificate #012345

Detection of c.2810G>A mutation in CNTNAP1 gene causing LPPN in several dog breeds

Customer: Jan Novák, Dlouhá 1, 30000 Plzeň, Czech Republic
Sample:
Sample: 08-12345
Date received: 25.11.2008
Sample type: blood

Information provided by the customer
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 of sampling: 25.11.2008
The identity of the animal has been checked.

Result: Mutation was not detected (N/N)

Legend: N/N = wild-type genotype. N/P = carrier of the mutation. P/P = mutated genotype (individual will be most probably affected with the disease). (N = negative, P = positive)

Explanation

Presence or absence of c.2810G>A mutation in CNTNAP1 gene causing Laryngeal Paralysis and Polyneuropathy (LPPN) in Labrador Retrievers, Leonbergers and Saint Bernard dogs was tested. LPPN is a disease that causes breathing and swallowing difficulties, increased risk of aspiration pneumonia and worse physical performance and high-stepping and uncoordinated gait. The characteristic signs in affected dogs are increased noisy breathing, wheezing to roaring sound, so-called stridor and bark change (hoarse bark).

Mutation that causes LPPN is inherited autosomally recessively which means that the disease develops only in those dogs who inherit mutated allele from both parents; disease affects dogs with P/P genotype only. The dogs with N/P genotype are considered carriers of the disease (heterozygotes). In offspring of two heterozygous animals following genotype distribution can be expected: 25 % N/N, 25 % P/P and 50 % N/P.

Method: SOP172-CNTAP1, direct DNA sequencing

Date of issue: 30.11.2008
Date of testing: 25.11.2008 - 30.11.2008
Approved by: Mgr. Martina Šafrová, Laboratory Manager

verified and certified document GENOMIA genetic laboratory

Genomia s.r.o, Republikánská 6, 31200 Plzeň, Czech Republic
www.genomia.cz, laborator@genomia.cz, tel: +420 373 749 999