GENOMIA
genetic laboratory

Result certificate #012345

Detection of c.673T>C mutation in PCYT1A gene causing SD3 in Vizslas

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: 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.673T>C mutation in PCYT1A gene causing Skeletal Dysplasia 3 (SD3) in Vizslas was tested. SD3 is a moderate form of disproportionate dwarfism. Affected dogs have short legs and their height at withers is reduced by an average of 11 cm compared to unaffected dogs. The long bones of the limbs are markedly shortened and thickened with flattened articular surfaces. Femoral deformity leads to subluxation of the hip joint and secondary deformity of the acetabulum.

Mutation that causes SD3 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: SOPAgriseq_canine, ngs, accredited method

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

Genomia is accredited in compliance with ISO/IEC 17025:2018 under #1549
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