GENOMIA
genetic laboratory

Result certificate #012345

Detection of c.407G>A mutation in F7 gene causing Factor VII deficiency in several dog breeds by DNA sequencing

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.

SAMPLE

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.407G>A mutation (previous nomenclature c.6385G>A) in F7 gene causing Factor VII (FVII) deficiency in several dog breeds (Airedale Terrier, Alaskan Klee, Kai, Beagle, Deerhound, Finnish Hound, Papillon, Phalene, Schnauzer Giant) was tested. Factor VII is a vitamin K-dependent glycoprotein that plays a pivotal role in the initiation of coagulation. The deficiency of FVII affects the blood coagulation and causes excessive bleeding in case of an injury or other intervention in the organism.

Mutation that causes FVII deficiency is inherited as an autosomal recessive trait. That means the disease affects dogs with P/P (positive/positive) genotype only. The dogs with N/P (negative/positive) genotype are considered carriers of the disease (heterozygotes). In offspring of two heterozygous animals following genotype distribution can be expected: 25 % N/N (healthy non-carriers), 25 % P/P (affected), and 50 % N/P (healthy carriers).

Method: SOP188-MPS-canine, MPS, 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

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Report verification code is: 12AB-CD34-GENO-MIA0-EFGH. You can verify report online at www.genomia.cz
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