GENOMIA
genetic laboratory

Result certificate #012345

Detection of SINE insertion in MITF gene

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: S/s

Explanation

Presence or absence of SINE insertion (short interspersed nucleotide element) in canine MITF gene was tested. The SINE insertion was only found in dogs presenting the extreme white or piebald phenotypes (s/s), and was absent in Irish-spotted and solid dogs (S/S).

The s-allele causing extreme white coloring (s^w) and piebald (s^p) is inherited incompletely dominant. One copy of the s-allele results in a dog with less white markings (called the "trim" pattern). Homozygous status (s/s) causes piebald or extreme white coat color.

- S/S –> solid color
- S/s –> dog carries one SINE inserted allele (s^w or s^p) –> less white markings, the s^w and s^p alleles cannot be distinguished by this test
- s/s –> the individual is homozygous for SINE insertion –> extremely white s^w/s^w or piebald s^p/s^p coat color appears

Method: SOP176-MITF-SINE, ASA-PCR

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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