

## Result certificate #012345

Detection of canine TYRP1 (locus B) gene variants influencing coat color

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: B/b<sup>s</sup>

## **Explanation**

Presence of TYRP1 gene (locus B) variants c.991C>T (allele b<sup>s</sup>), c.1033\_1036delCCT (allele b<sup>d</sup>) and c.121T>A (allele b<sup>c</sup>) causing brown coat or nose color was examined. It is a set of locus B (Brown) alleles. Wild type allele is called B.

- If the result is B/B the individual does not carry brown color.
- If the result is B/b<sup>c</sup> or B/b<sup>d</sup>, B/b<sup>s</sup> the individual carries brown color.
  If the result is b<sup>c</sup>/b<sup>c</sup> or b<sup>d</sup>/b<sup>d</sup> or b<sup>s</sup>/b<sup>s</sup>the individual is brown colored.
- If the result contains two or more different b-alleles the individual could be either carrier of brown color without brown color phenotype (b-alleles are inhered from one parent only) or is brown colored (b-alleles are inhered from both parents). It is not possible to summarize locus B genotype without testing the parents.

Phenotype of b allele (brown color) is inherited as a autosomal recessive trait. This examination does not exclude existence of any unknown variant of TYRP1 gene causing brown coat and nose color. Final coat color is influenced also by other loci (A, E, D, K).

Method: SOPAgriseq\_canine, ngs

Date of issue: 06.02.2021

Date of testing: 01.02.2021 - 06.02.2021

Approved by: Mgr. Martina Šafrová, Laboratory Manager



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