GENOMIA
genetic laboratory

# Result certificate #012345

Detection of $e^H$ gene variant canine locus E responsible for 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: eH allele absent

### Explanation

Presence or absence of c.250G>A variant in MC1R gene was tested, that is $e^H$ variant of locus E. Allele $e^H$ is responsible for sable color in American and English Cocker Spaniels. Expression of $e^H$ in other breeds is not excluded.

Locus E hierarchy expression is as follows: $E^M > E > e^H > e$. This test only gives information about the $e^H$ variant, not about E locus as a whole.

If the genotype contains the $e^H$ allele in combination with the $E^M$ or E allele, which are dominant to it, the resulting phenotype will not show sable colouration. The sable effect will only occur when the $e^H$ allele is combined with another $e^H$ allele or the $e^1$ allele.

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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