

Result certificate #012345

Detection of c.790A>G gene variants in MC1R gene responsible for melanistic mask in dogs

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: E^M/N

Explanation

Presence or absence of c.790A>G MC1R gene variants (melanocortin 1 receptor) was tested. Dominant gene variant c.790G is called E^M . Genotypes E^M/N a E^M/E^M cause melanistic mask in dogs. Melanistic mask phenotype depends on coat color. However, not all dogs with the E^M -allele have melanistic mask. In brown, black or blue coated dogs, it is often difficult to distinguish the melanistic mask from their coat color. The color of the melanistic mask corresponds with the other genes affecting the production of the eumelanin type. Therefore, the melanistic mask may not be always black. Phenotype of E^M allele is inherited as an autosomal dominant trait. Dogs with N/N result do not have melanistic mask.

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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