

## Result certificate #012345

Detection of c.1006 1019del mutation in ABHD5 gene causing ichthyosis 2 in Golden Retrievers

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: Mutation was not detected (N/N)

## **Explanation**

Presence or absence of c.1006\_1019del mutation in ABHD5 gene causing ichthyosis 2 in Golden Retrievers breed was tested. The first symptoms of skin keratinisation begin to develop soon after birth. The degree of symptom expression varies between individuals – from an initial slight formation of light-coloured scales to the gradual formation of larger areas of dark scales. In some cases, secondary infections occur in the affected areas of the skin due to bacteria or fungi. Golden retrievers also have recessively inherited ichthyosis 1, which is caused by a mutation in the PNPLA1 gene.

Mutation that causes ichthyosis 2 is inherited as an autosomal recessive trait. That means the disease affects dogs with P/P (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: 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

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