

Result certificate #290765

Detection of c.5G>A mutation in PRCD gene causing PRA-prcd in many dog breeds

Customer: Dušan Kollárik, Belá 33, 03811 Belá-Dulice, Slovak Republic

Sample:

Sample: 25-05401 Date received: 04.03.2025 Sample type: buccal swab

Information provided by the customer

Name: Heidi Bella Aurea Breed: Golden Retriever Microchip: 941 000 026 557 633 Reg. number: SPKP 4826/24 Date of birth: 17.6.2023

Sex: female

Date of sampling: 28.02.2025

The identity of the animal has been checked by MVDr. Juraj

Chorváth, 0011

Result: Mutation was not detected (N/N)

Legend: N/N = wild-type genotype. N/P = carrier of the mutation. P/P = mutated genotype (individual will be most probably affected with the disease). (N = negative, P = positive)

Explanation

Presence or absence of c.5G>A mutation in PRCD gene causing PRA-prcd (Progressive Retinal Atrophy) was tested. Disease causes degeneration of retinal cells. That results in complete blindness of the animal. The age of onset of disease varies, but, generally, it cannot be recognized before the adulthood of the animal.

Mutation that causes PRA-prcd is inherited as an autosomal recessive trait. That means the disease affects dogs with P/P genotype only. The dogs with N/P genotype are considered carriers of the disease (heterozygotes). In offspring of two heterozygous animals following genotype distribution can be expected: 25 % N/N, 25 % P/P and 50 % N/P.

It is necessary to be aware that not all retinal diseases belong in progressive retina atrophy group of disorders and not all are a variant of PRA-prcd. In many breeds, the cause of PRA inheritance has not been still clarified. It is also possible that several mutations can be responsible for retinal atrophy in one breed. Therefore, we recommend that an eye examination by a veterinary ophthalmologist is performed every year.

The analysis was carried out by partner laboratory.

Method: SOPAgriseg canine, ngs

Date of issue: 14.03.2025

Date of testing: 04.03.2025 - 14.03.2025

Approved by: Mgr. Markéta Dajbychová, Deputy Laboratory Manager

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