GENOMIA
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Result certificate #215109

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

Customer: Míšek Pavel, Radošov 192, 36272 Kyselka, Czech Republic
Sample:
Sample: 22-31704
Date received: 15.11.2022
Sample type: buccal swab

Information provided by the customer
Name: Nelson Golden Victory
Breed: Golden Retriever
Tattoo number: BNY 4513
Microchip: 643 099 011 505 604
Reg. number: ČLP/GR/23461
Date of birth: 11.06.2021
Sex: male
Date of sampling: 14.11.2022
The identity of the animal has been checked by MVDr. Sabina Marie Šteklová, KVL 4726

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, generallly, 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: SOP182-PRA, HRMA

Date of issue: 25.11.2022
Date of testing: 15.11.2022 - 25.11.2022
Approved by: Ing. Irena Rusková, Analyst

verified and certified document
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