

Result certificate #254281

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

Customer: Lenka Orzelová, Bohumínská 437/42, 710 00 Slezská Ostrava, Czech Republic Sample: Sample: 24-40118

Date received: 30.01.2024 Sample type: buccal swab

Information provided by the customer Name: Carramia Royal Glow Breed: Poodle Standard Microchip: 941000027192388 Reg. number: CMKU/P/23254/22

Date of birth: 17.7.2022 Sex: female Date of sampling: 27.01.2024 The identity of the animal has been checked by Ing. Nikola Eretová, Genomia s.r.o.

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: SOPAgriseq_canine, ngs

Date of issue: 12.02.2024 Date of testing: 30.01.2024 - 12.02.2024 Approved by: Mgr. Martina Šafrová, Laboratory Manager



Genomia s.r.o, Republikánská 6, 31200 Plzeň, Czech Republic www.genomia.cz, laborator@genomia.cz, tel: +420 373 749 999