GENOMIA
genetic laboratory

Result certificate #148772

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

Customer: Gerda van Empel, Dollemansstraat 2, 7223 KG BAAK, Netherlands

Sample:
Sample: 20-11922
Date received: 18.05.2020
Sample type: buccal swab

Information provided by the customer
Name: Eos Euphoria of Anton
Breed: English Cocker Spaniel
Microchip: 807 050 000 006 099
Reg. number: 3186435
Date of birth: 02-12-2018
Sex: male

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 the PrcdTest Laboratory, branch office of Genomia.

Method: SOP182-PRA, HRMA

Date of issue: 26.05.2020
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Approved by: Mgr. Martina Šafrová, Laboratory Manager

verified and certified document GENOMIA genetic laboratory

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