

Sample

Sample: 19-13527
Name: Adina Dvůr Bažantnice
Breed: Collie Smooth
Microchip: 972 273 000 004 700
Reg. number: CMKU/CK/1079/16/18
Date of birth: 24.04.2016
Sex: female
Date received: 16.05.2019
Sample type: blood
The identity of the animal has been checked by
MVDr. Michaela Oravská

Customer

Ing. Lucie Glaserová
Doubek 109
25101 Doubek
Czech Republic

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 22 bp insertion in exon 4 of RD3 gene causing RCD2 disease (rode-cone dysplasia 2) in rough and smooth collies was tested. RCD2 is manifested by retina degeneration that leads to early onset night blindness in puppies about 6 weeks of age. RCD2 affected dogs are usually totally blind in one year of age.

Insertion in RD3 gene 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.

Method: SOP171-RCD2, fragment analysis

Report date: 23.05.2019

Responsible person: Mgr. Martina Šafrová, Laboratory Manager

