

Result certificate #016161:

Detection of c.7437G>A mutation in exon 43 of VWF gene causing vWD type I in several dog breeds by PCR-RFLP

Sample

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Sample: 12-01018

Name: Dog's Paradise Panchouh Breed: Australian Labradoodle Reg. number: ALAEU-283 Microchip: 528210002452644 Date of birth: 15-11-2009

Sex: female

Date received: 23.01.2012 Sample type: buccal swab Customer

AMJ de Koning Trum Biezenmortelsestraat 2 5074 PD Biezenmortel Netherlands

Result: Mutation was not detected (N/N)

Explanation

Presence or absence of c.7437G>A mutation in exon 43 of VWF gene causing vWD type I was tested. This mutation causes deficiency or failure of VWF (von Willebrand factor) which is called von Willebrand disease type I (vWD I). VWD manifests as bleeding which is most apparent in tissues having high blood flow shear in narrow vessels. VWD manifests oneself as a tendency to bleeding from skin and tissues.

VWD type I is the most often and simultaneously the least serious form of mammalian vWD. The disease is characteristic by low plasma vWF concentration and normal vWF protein structure. VWD type I occurs, for example, in dog breeds Bernese Mountain Dog, Doberman Pinscher, Manchester terrier, Welsh Corgi Pembroke, all Poodles, Labradoodle, Goldendoodle.

VWD type I 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 (healthy non-carriers), 25 % P/P (affected), and 50 % N/P (healthy carriers).

Method: SOP51

Report date: 01.02.2012

Responsible person: Mgr. Markéta Dajbychová, Deputy Laboratory Manager

Dog bychova

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