Genomia
genetická laboratoř

L 1549

Result report #003409

Diagnostic test for Collie Eye Anomaly (CEA) by multiplex PCR

Customer
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Details of animal
Sample: 10-04001
Animal: Luke Krásná Louka
Breed: Smooth Collie
Reg. number: CMKU/CK/328/09
Microchip: 250269602663355
Year of birth: 2009
Sex: male
Date received: 16.03.2010
Sample type: buccal swab

Result: Mutation was not detected (N/N)

Explanation

7,8 kb deletion in intron 4 of canine NJEH1 gene was tested. The eye anomaly caused by this deletion affects most often collie breeds including Rough Collie, Smooth Collie, Border Collie, Shetland Sheepdog and Australian Sheepdog. CEA disease 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: SOP02, accredited method
Sensitivity (probability of correct identification of the defective form of the gene in heterozygous or mutated homozygous) is higher than 99%. Specificity (probability of correct identification of the normal form of the gene in a normal homozygous or heterozygous) is higher than 99%.

Report date: 18.03.2010
Responsible person: Mgr. Markéta Dajbychová, Veterinary Laboratory Manager

