



Result report #004696

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

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Details of animal

Sample: 10-15706 Animal: NAUGHTY BUT NICE Gasko Prim Breed: Border Collie Reg. number: 2296 Microchip: 203098100230197 Year of birth: 15.09.2007 Sex: female Date received: 22.06.2010 Sample type: blood

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: 23.06.2010 Responsible person: Mgr. Martina Šafrová, Laboratory Manager

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