

Result certificate #036675:

Detection of g.9459_9460ins236 mutation in PLPLA gene causing CNM in Labrador Retrievers by PCR

Sample

Sample: 13-20219

Name: Angel BellissimaNera Breed: Labrador Retriever

Reg. number: 25477 Date of birth: 22.09.2010

Sex: male

Date received: 26.07.2013 Sample type: buccal swab

Customer

Alena Šiplová Radošov 224 36272 Kyselka Czech Republic

Result: Mutation was not detected (N/N)

Explanation

Presence or absence of g.9459_9460ins236 mutation in PLPLA gene causing CNM (Centronuclear Myopathy or also HMLR (Hereditary Myopathy in Labrador Retrievers)) in Labrador Retrievers was tested. CNM is a genetically conditioned defect of muscle fibres development. The disease manifests in two weeks of puppies age, muscle atrophy gradually affects movement and swallowing muscles. Affected individuals die during the first weeks or months of life.

Mutation that causes CNM is inherited as an autosomal recessive trait. That means the disease affects dogs with P/P (positive / positive) genotype only. The dogs with N/P (negative / positive) 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: SOP86

Report date: 31.07.2013

Responsible person: Mgr. Markéta Dajbychová, Deputy Laboratory Manager

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