

### Result certificate #078860

Detection of c.289G>T COL6A1 gene causing muscular dystrophy in Landseer

# Sample

Sample: 16-14433 Name: Daffy Alvemia

Breed: Landseer (European Continental type)

Tattoo number: 477

Microchip: 203 098 100 281 333 Reg. number: CMKU/LS/477/09 Date of birth: 21.10.2009

Sex: female

Date received: 02.06.2016 Sample type: buccal swab

The identity of the animal has been checked by

MVDr. Petr Pohořalý

## Customer

Renata Cepková U Kostela 166 28141 Ratboř 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 = carrier of the mutation. P/P = carrier of the mutation.

### **Explanation**

Presence or absence of c.289G>T mutation in COL6A1 gene causing muscular dystrophy in Landseer was tested. Muscular dystrophy is an inherited disease causing progressive muscle weakness.

Mutation that causes muscular dystrophy in Landseer 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), they are healthy but they can transmit the mutation on their offspring. In offspring of two heterozygous animals following genotype distribution can be expected: 25 % N/N (healthy non-carriers), 50 % N/P (healthy carriers) and 25 % P/P (affected).

Method: SOP172-MDL, direct DNA sequencing

Report date: 13.06.2016

Responsible person: Mgr. Martina Šafrová, Laboratory Manager

Saferra