

## Result certificate #012345

Detection of c.1749\_1752del mutation in MAN2B1 gene causing Alpha-mannosidosis in the Persian cats

Customer: Jan Novák, Dlouhá 1, 30000 Plzeň, Czech Republic

Sample:

Sample: 08-12346 Date received: 01.01.2008 Sample type: buccal swab

Information provided by the customer

Name: Madame Théophile DEMO

**Breed: Persian cat**Date of birth: 31.12.1909

Reg. number: (CZ)ABCD EF 123/45/XYZ

Microchip: 123456789012345

Sex: female

Date of sampling: 01.01.2008

The identity of the animal has been checked.

## 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 = negative, P = positive)

## **Explanation**

Presence or absence of c.1749\_1752del mutation in MAN2B1 gene causing Alpha-mannosidosis in the Persian cats was examined. Alpha-mannosidosis is a lysosomal storage disease. Clinical symptoms include neurological signs (ataxia, head tremor, nystagmus, aggressiveness, paralysis), skeletal abnormalities, growth retardation, gingivitis, and corneal and lenticular opacities. The disease is incurable, death occurs after about 6 months.

Mutation that causes Alpha-mannosidosis is inherited autosomally recessively which means that the disease develops only in those cats who inherit mutated allele from both parents; disease affects cats with P/P genotype only. The cats 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, 25 % P/P and 50 % N/P.

Method: SOPAgriseq\_feline, ngs

Date of issue: 06.01.2008

Date of testing: 12.06.2008 - 06.01.2008

Approved by: Mgr. Martina Šafrová, Laboratory Manager



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