GENOMIA
genetic laboratory

Result certificate #012345

Detection of feline TYRP1 (locus B) gene variants influencing coat color

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: 123 456 789 012 345
Sex: female
Date of sampling: 01.01.2008
The identity of the animal has been checked.

Result: PREVIEW RESULT LINE

Explanation

Presence or absence of gene variants c.[8C>G; 1262+5G>A] (b-allele causing chocolate coat color) and c.298C>T (b^{l}-allele causing cinnamon coat color) in TYRP1 gene (locus B) was examined. Three variant alleles of locus B were identified in following hierarchy: B>b>b^{l}. The dominant B-allele is original (wild type) allele and determines dark color.

The brown and cinnamon coat color is inherited autosomal recessively, i.e. the phenotype comes to expression only in cats which inherited these b-alleles from both parents. A cat with b/b genotype is chocolate-brown colored and a cat with b^{l}/b^{l} genotype is cinnamon colored. A cat with b/b^{l} genotype is brown colored, the phenotype is lighter than b/b cat, and is also a carrier of cinnamon hair coloration.

Existence of other unknown gene variants in TYRP1 gene responsible for brown coat color cannot be excluded.

Method: SOPAgriseq_feline, MPS

Date of issue: 06.01.2008
Date of testing: 12.06.2008 - 06.01.2008
Approved by: Mgr. Martina Šafrová, Laboratory Manager

verified and certified document
GENOMIA genetic laboratory

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