

Detection of 18 bp insertion in position -53  
5'UTR of the CMAH gene implicating feline  
blood group phenotype

**Sample**

Sample: 17-08634  
Name: HEREK Alfa - Pol - Cat, CZ  
Breed: British Shorthair  
Date of birth: 01.04.2016  
Reg. number: (CZ)ČSCH LO 468/16/BSH  
Microchip: 941 000 019 815 626  
Sex: male  
Date received: 31.03.2017  
Sample type: buccal swab  
The identity of the animal has been checked by  
MVDr. Petra Domesová

**Customer**

Šárka Velčovská  
Janovice 579  
73911 Frýdlant nad Ostravicí  
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Result: Based on mutation examination genotype was determined non-b/b

**Explanation**

Presence or absence of 18 bp insertion in position -53 5'UTR of the CMAH gene implicating feline blood group phenotype was tested. Genetic test is based on detection of allele **b**, which is linked to feline serological B blood group.

Result codes:

**non-b/non-b** – **b** allele not detected, serological blood group A or AB

**non-b/b** – one copy of **b** allele detected, carrier individual, serological blood group A or AB

**b/b** – two copies of **b** allele detected, serological group B

The genetic test is not suitable for Ragdoll and Turkish Angora cats.

The knowledge of blood groups in cats is important in any need of blood transfusion and in case of neonatal isoerythrolysis (NI) in newborn kittens.

Kittens can suffer from NI in case of crossbreeding of a B blood type female cat to a A blood type male cat. Risk arises for kittens with A blood group (in fact these kittens are genetically A/b). Kittens are fed with colostrum containing anti-A antibodies. These anti-A antibodies destroy their own erythrocytes. Within a few hours hemolytical disease develops and kittens are in danger of life. Accompanying symptoms of hemolytical disease are disappearance of suction reflex, lethargy, restlessness, icterus, brown colour of urine. The main prevention of NI is to find out blood groups of parent cats to prevent mating a B blood type female cat to a A blood type male cat.

Method: SOP171-CMAH, fragment analysis, accredited method

Report date: 04.04.2017

Responsible person: Mgr. Martina Šafrová, Laboratory Manager



Genomia is accredited according to ISO/IEC 17025:2005 under #1549.

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