dr. van haeringen laboratorium b.v. a VHLGenetics company

ksz Szymanska Zeromskiego 16/20 35 01-831 warszawa POLAND Customer number 97980

Analysis Certificate

Animal data

Name: Date of birth: Sexe: Reg. nr.: Breed: ALWARO CHALLANGER 15.03.2013 Male MCI 150313004 Maine Coon

Sample data

VHL_ID: Test ID-nr: Material: K14873 14424 1 Swab

K754 - Pyruvatekinase Def. - Date of test: 10.03.2017 Testresult: NORMAL

K751 - GSD Type IV - Date of test: 10.03.2017 Testresult: NORMAL

K793 - Bloodtyping (DNA) - Date of test: 10.03.2017 Testresult: genotype N/N

K762 - rdAc-PRA - Date of test: 10.03.2017 Testresult: NORMAL

K711 - PKD test - Date of test: 10.03.2017 Testresult: pkd1/pkd1

K799 - HCM3 - Date of test: 10.03.2017 Testresult: NORMAL

K725 - HCM1 Test - Date of test: 10.03.2017 Testresult: NORMAL

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K767 - SMA - Date of test: 10.03.2017 Testresult: NORMAL

> W.A. van Haeringen, PhD Executive Director

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K754 - Pyruvatekinase Def.

Explanation about the result:

NORMAL: The animal is free and has two healthy alleles. When used in breeding, this animal will not become ill due to the disease. It cannot spread the disease in the population.

CARRIER: The animal is carrier and has one healthy and one mutant (disease) allele. When used in breeding, 50 percent of the offspring will receive the disease allele. Carriers will not become ill.

AFFECTED: The animal is affected and has two mutant (disease) alleles. When used in breeding, all offspring will receive the mutant allele from this animal. Affected animals will become ill.

K751 - GSD Type IV

Explanation about the result:

NORMAL: The animal is free and has two healthy alleles. When used in breeding, this animal will not become ill due to the disease. It cannot spread the disease in the population.

CARRIER: The animal is carrier and has one healthy and one mutant (disease) allele. When used in breeding, 50 percent of the offspring will receive the disease allele. Carriers will not become ill.

AFFECTED: The animal is affected and has two mutant (disease) alleles. When used in breeding, all offspring will receive the mutant allele from this animal. Affected animals will become ill.

K793 - Bloodtyping (DNA)

Information about the Bloodtyping (DNA):

genotype b/b: The cat carries two copies of the recessive b allele. Serologically the cat shows bloodgroup B.

genotype N/b: The cat carries one copy of the recessive b allele. Serologically the cat shows bloodgroup A or AB. The cat will pass the mutation onto its offspring with a probability of 50%.

genotype N/N: The cat is a non-carrier of the recessive b allele. Serologically the cat shows bloodgroup A or AB. This test is valitated in all breeds, except Ragdolls and Turkish Angora.

In a few percent of the cases, results are inconclusive and status of the B blood group cannot be determined. This is caused by a conclusive and status of the B blood group cannot be determined. This is caused by a conclusive and status of the B blood group cannot be determined.

K762 - rdAc-PRA

Explanation about the result:

NORMAL: The animal is free and has two healthy alleles. When used in breeding, this animal will not become ill due to the disease. It cannot spread the disease in the population.

CARRIER: The animal is carrier and has one healthy and one mutant (disease) allele. When used in breeding, 50 percent of the offspring will receive the disease allele. Carriers will not become ill.

AFFECTED: The animal is affected and has two mutant (disease) alleles. When used in breeding, all offspring will receive the mutant allele from this animal. Affected animals will become ill.

K711 - PKD test

Information about the PKD test:

Based on the results three groups of animals can be detected:

pkd1/pkd1: The cat is NO CARRIER, and has two healthy copies from the gene.

PKD1/pkd1: The cat is AFFECTED, and has one healthy and one defect copy from the gene.

PKD1/PKD1: The cat is AFFECTED, and has two defect copies from the gene.

The PKD test detects the presence of a mutation in the ADPKD1 gene (C->A mutation in exon 29), which is suggested to be responsible for Polycystic Kidney Disease (PKD) in several breeds. PKD of other genesis, especially caused by other unknown mutations cannot be excluded by this test.

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K799 - HCM3

Explanation about the result:

NORMAL: The animal is free and has two healthy alleles. When used in breeding, this animal will not become ill due to the disease. It cannot spread the disease in the population.

CARRIER: The animal is carrier and has one healthy and one mutant (disease) allele. When used in breeding, 50 percent of the offspring will receive the disease allele. Carriers will also become ill.

AFFECTED: The animal is affected and has two mutant (disease) alleles. When used in breeding, all offspring will receive the mutant allele from this animal. Affected animals will become ill.

Information about the HCM3 test

The HCM3 test is based on the detection of a mutation in the MYBPC3 gene,

which is suggested to cause hypertrophic cardiomyopathy (HCM) in Ragdoll cats.

In Ragdolls the mutation which is suggested to cause HCM is like in Maine Coons

in the MYBPC3-gene but in a different domain. HCM of other genesis caused by

other mutations cannot be excluded by this test.

K725 - HCM1 Test

Explanation about the result:

NORMAL: The animal is free and has two healthy alleles. When used in breeding, this animal will not become ill due to the disease. It cannot spread the disease in the population.

CARRIER: The animal is carrier and has one healthy and one mutant (disease) allele. When used in breeding, 50 percent of the offspring will receive the disease allele. Carriers will also become ill.

AFFECTED: The animal is affected and has two mutant (disease) alleles. When used in breeding, all offspring will receive the mutant allele from this animal. Affected animals will become ill.

Information about the HCM1 test

The HCM1 test detects the mutation in the MYBPC gene (G->C mutation

in exon 3) which is suggested to be responsible for hypertrophic

cardiomyopathy in several cat breeds. HCM of other genesis especially

caused by other mutation or other unknown mutations cannot be excluded by this test.

by this test.

K767 - SMA

Explanation about the result:

NORMAL: The animal is free and has two healthy alleles. When used in breeding, this animal will not become ill due to the disease. It cannot spread the disease in the population.

CARRIER: The animal is carrier and has one healthy and one mutant (disease) allele. When used in breeding, 50 percent of the offspring will receive the disease allele. Carriers will not become ill.

AFFECTED: The animal is affected and has two mutant (disease) alleles. When used in breeding, all offspring will receive the mutant allele from this animal. Affected animals will become ill.

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