



Call Name:EstyaCountry:SwitzerlandMicrochip:756098000039546Testing date:2020/1/15

Breed: Ragdoll
Gender: Female

Cat's identity verified from microchip or tattoo by veterinarian or other authorized person during sample taking: Yes

Test results - Known disorders in the breed

| Disorder | Туре | Mode of Inheritance | Result |
|--|----------------------|--|--------|
| Hypertrophic Cardiomyopathy, MYBPC3 mutation: c.2460C>T found in Ragdoll | Cardiac Disorders | Autosomal Dominant (Incomplete Penetrance) | Clear |
| Polycystic Kidney Disease | Renal Disorders | Autosomal Dominant | Clear |

Test results - New potential disorders in the breed

| Disorder | Туре | Mode of Inheritance | Result |
|---------------------------|------------------|---------------------|--------|
| Retinal Dystrophy (rdAc) | Ocular Disorders | Autosomal Recessive | Clear |

On behalf of Genoscoper Laboratories,

SIGNATURE





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Test results - Traits - page 1

Blood Type

| Trait | Genotype | Description |
|-------------------------|----------|-----------------------|
| Blood Type (3 variants) | N/N | Cat has blood type A. |

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Test results - Traits - page 2

Coat Color

| Trait | Genotype | Description |
|---|-----------------|---|
| Color Locus B: Chocolate and Cinnamon (2 variants) | b/b | The cat produces brown pigment. |
| Color Locus C: Pointed Coloration and Albinism (3 variants) | cs/cs | The cat is likely to have Siamese type color point restriction. |
| Color Locus A: Agouti and Charcoal (2 variants) | a/a | The cat is likely to have non-agouti (solid) coat color. |
| any FERV1 insertion in the <i>KIT</i> gene | N/Ws II N/DW | The cat has one FERV1 insertion in the KIT gene and one wild type allele. The cat with pattern of white spotting has one White spotting insert and all white cat has one Dominant White insert. |
| MLPH T83del (d allele) | D/d | The coat color is not diluted; the cat carries one copy of the dilute gene. |
| MC1R c.250G>A (e allele) | E/E | The cat does not have e allele for Amber color found in Norwegian Forest Cat. |
| KIT c.1035_1036delinsCA | N/g | The cat carries KIT mutation associated with gloving pattern in Birman breed. This variant is also found in other breeds of cats. |
| MC1R (er allele) | -/- | The cat does not have er allele for Russet color found in Burmese. |

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Test results - Traits - page 3

Coat Type

| Trait | Genotype | Description |
|-------------------------|----------|---|
| Long Hair (4 variants) | M4/M4 | The cat is likely to have long hair. |
| LPAR6 c.250_253_delTTTG | N/N | The cat does not have Cornish Rex curly coat. |
| KRT71 c.445-1C | N/N | The cat does not have Selkirk Rex curly coat. |

Morphology

| Trait | Genotype | Description |
|--|----------|---|
| Short tail, T-box mutations (3 variants) | N/N | The cat does not have any of the tested bobtail mutations originally found in Manx. |
| Polydactyly (3 variants) | N/N | The cat does not have any of the tested mutations causing extra digits. |
| HES7 c.T5C | T/T | The cat has no bobtail mutation originally found in Japanese Bobtail. |

On behalf of Genoscoper Laboratories,

SIGNATURE



Blood Disorders

| Disorder | Mode of Inheritance | Result |
|---|---------------------|--------|
| Erythrocyte Pyruvate Kinase (PK) Deficiency | Autosomal Recessive | Clear |
| Factor XII Deficiency | Autosomal Recessive | Clear |
| Hemophilia B, mutation F9: c.1014C>T | X-linked Recessive | Clear |
| Hemophilia B, mutation F9: c.247G>A | X-linked Recessive | Clear |

Cardiac Disorders

| Disorder | Mode of Inheritance | Result |
|--|--|--------|
| Hypertrophic Cardiomyopathy, MYBPC3 mutation: A31P found in Maine Coon | Autosomal Dominant (Incomplete Penetrance) | Clear |

Endocrine Disorders

| Disorder | Mode of Inheritance | Result |
|--------------------------------|---------------------|--------|
| Congenital Adrenal Hyperplasia | Autosomal Recessive | Clear |

Immunologic Disorders

| Disorder | Mode of Inheritance | Result |
|---|---------------------|--------|
| Autoimmune Lymphoproliferative Syndrome | Autosomal Recessive | Clear |
| Congenital Hypotrichosis with Short Life Expectancy | Autosomal Recessive | Clear |



Metabolic Disorders

| Mode of Inheritance | Result |
|---------------------|---|
| Autosomal Dominant | Clear |
| Autosomal Recessive | Clear |
| | Autosomal Dominant Autosomal Dominant Autosomal Dominant Autosomal Dominant Autosomal Recessive |



Muscular Disorders

| Disorder | Mode of Inheritance | Result |
|--|---------------------|--------|
| Congenital Myasthenic Syndrome (CMS) | Autosomal Recessive | Clear |
| Myotonia Congenita | Autosomal Recessive | Clear |
| Periodic Hypokalemic Polymyopathy, Burmese Hypokalemia, or Familial Episodic Hypokalaemic Polymyopathy | Autosomal Recessive | Clear |
| Spinal Muscular Atrophy (SMA)/Spinal Muscular Dystrophy | Autosomal Recessive | Clear |

Neurologic Disorders

| Disorder | Mode of Inheritance | Result |
|--|---------------------|--------|
| Feline GM1 Gangliosidosis | Autosomal Recessive | Clear |
| GM2 Gangliosidosis, Domestic Shorthair mutation HEXB: c.1467_1491inv | Autosomal Recessive | Clear |
| GM2 Gangliosidosis, Japanese Domestic mutation HEXB: c.667C>T | Autosomal Recessive | Clear |
| GM2 Gangliosidosis; Domestic Shorthair GM2A Mutation | Autosomal Recessive | Clear |
| Niemann-Pick C2, NPC Disease, Sphingomyelinosis NPC2 Mutation | Autosomal Recessive | Clear |
| Niemann–Pick C1, NPC Disease, Sphingomyelinosis NPC1 Mutation | Autosomal Recessive | Clear |

Neuromuscular Disorders

| Disorder | Mode of Inheritance | Result |
|----------------------------------|---------------------|--------|
| Glycogen Storage Disease Type IV | Autosomal Recessive | Clear |



Ocular Disorders

| Disorder | Mode of Inheritance | Result |
|----------------------------|---------------------|--------|
| Bengal Progressive Atrophy | Autosomal Recessive | Clear |
| Retinal Dystrophy (rdAc) | Autosomal Recessive | Clear |
| Renal Disorders | | |
| Disorder | Mode of Inheritance | Result |
| Hyperoxaluria | Autosomal Recessive | Clear |



APPENDIX Explanation of the results of the tested disorders

Autosomal recessive inheritance (ARI)

Clear - A cat carries no copies of the tested mutation and has no or reduced likelihood of developing and passing on the disease/condition.

Carrier - A cat carries one copy of the tested mutation. Carriers typically have a normal, healthy appearance but pass on the mutation to approximately 50% of their offspring.

At risk - A cat carries two copies of the tested mutation and is at high or increased risk of developing the disease/condition.

Autosomal dominant inheritance (ADI)

Clear - A cat carries no copies of the tested mutation and has no or reduced likelihood of developing and passing on the disease/condition.

At risk - A cat carries one or two copies of the tested mutation and is at high or increased risk of developing the disease/condition.

X-linked recessive inheritance (X-linked)

Clear - A cat carries no copies of the tested mutation and has no or reduced likelihood of developing and passing on the disease/condition.

Carrier - Female carriers typically have a normal, healthy appearance but carry one copy of the tested mutation on one of their X chromosomes. As males only have one X chromosome, there are no male carriers.

At risk - Female cats at risk carry two mutated copies of the tested mutation. Males carry one copy of the tested mutation on their single X chromosome. Cats at risk are at high or increased risk of developing the disease/condition.

Please note that the descriptions above are generalized based on typically observed inheritance patterns. When obtaining a 'carrier' or 'at risk' test result, always refer to the corresponding online test documentation for more detailed information on the condition and any exceptions.

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