

Blossom
Registration: N/A
Breed: Maine Coon

DNA Test Report

Owner Info

| | |
|-------------------|------------------|
| First Name | Last Name |
| Sarah | Nuckolls |

Pet Info

| | |
|-----------------------------|----------------------|
| Registered Name | Date of Birth |
| Blossom | 3/29/2022 |
| Nickname (Call Name) | Sample ID |
| Blossom | FTZMYGX |
| Sex | Registration |
| Female | N/A |
| Country of Origin | Microchip ID |
| US | N/A |
| Owner Reported Breed | Tattoo ID |
| Maine Coon | N/A |

DNA Test Report

Health Conditions Known in This Breed

| Genetic Condition | Gene | Risk Variant | Copies | Result |
|--|--------|--------------|--------|--------|
| Cystinuria Type B (Variant 3) | SCL7A9 | T>A | 0 | Clear |
| Factor XII Deficiency (Variant 1) | F12 | Deletion | 0 | Clear |
| Factor XII Deficiency (Variant 2) | F12 | Deletion | 0 | Clear |
| Hypertrophic Cardiomyopathy (Discovered in the Maine Coon) | MYBPC | G>C | 0 | Clear |
| MDR1 Medication Sensitivity | ABCB1 | Deletion | 0 | Clear |
| Polycystic Kidney Disease (PKD) | PKD1 | C>A | 0 | Clear |
| Pyruvate Kinase Deficiency | PKLR | G>A | 0 | Clear |
| Spinal Muscular Atrophy (Discovered in the Maine Coon) | LIX1 | Deletion | 0 | Clear |

Other Conditions Tested

| Genetic Condition | Gene | Risk Variant | Copies | Result |
|---|---------|--------------|--------|--------|
| Acute Intermittent Porphyria (Variant 1) | HMBS | Deletion | 0 | Clear |
| Acute Intermittent Porphyria (Variant 2) | HMBS | G>A | 0 | Clear |
| Acute Intermittent Porphyria (Variant 3) | HMBS | Insertion | 0 | Clear |
| Acute Intermittent Porphyria (Variant 4) | HMBS | Deletion | 0 | Clear |
| Acute Intermittent Porphyria (Variant 5) | HMBS | G>A | 0 | Clear |
| Autoimmune Lymphoproliferative Syndrome | FASL | Insertion | 0 | Clear |
| Burmese Head Defect (Discovered in the Burmese) | ALX1 | Deletion | 0 | Clear |
| Chediak-Higashi Syndrome (Discovered in the Persian) | LYST | Insertion | 0 | Clear |
| Congenital Adrenal Hyperplasia | CYP11B1 | G>A | 0 | Clear |
| Congenital Erythropoietic Porphyria | UROS | G>A | 0 | Clear |
| Congenital Myasthenic Syndrome (Discovered in the Devon Rex and Sphynx) | COLQ | G>A | 0 | Clear |
| Cystinuria Type 1A | SCL3A1 | C>T | 0 | Clear |

DNA Test Report

Other Conditions Tested (continued)

| Genetic Condition | Gene | Risk Variant | Copies | Result |
|--|--------|--------------|--------|--------|
| Cystinuria Type B (Variant 1) | SCL7A9 | C>T | 0 | Clear |
| Cystinuria Type B (Variant 2) | SCL7A9 | G>A | 0 | Clear |
| Dihydropyrimidinase Deficiency | DPYS | G>A | 0 | Clear |
| Earfold and Osteochondrodysplasia (Discovered in the Scottish Fold) | TRPV4 | G>T | 0 | Clear |
| Familial Episodic Hypokalemic Polymyopathy (Discovered in the Burmese) | WNK4 | C>T | 0 | Clear |
| Glutaric Aciduria Type II | ETFDH | T>G | 0 | Clear |
| Glycogen Storage Disease (Discovered in the Norwegian Forest Cat) | GBE1 | Insertion | 0 | Clear |
| GM1 Gangliosidosis | GLB1 | G>C | 0 | Clear |
| GM2 Gangliosidosis | GM2A | Deletion | 0 | Clear |
| GM2 Gangliosidosis Type II (Discovered in Domestic Shorthair cats) | HEXB | Insertion | 0 | Clear |
| GM2 Gangliosidosis Type II (Discovered in Japanese domestic cats) | HEXB | C>T | 0 | Clear |
| GM2 Gangliosidosis Type II (Discovered in the Burmese) | HEXB | 0>0 | 0 | Clear |
| Hemophilia B (Variant 1) | F9 | C>T | 0 | Clear |
| Hemophilia B (Variant 2) | F9 | G>A | 0 | Clear |
| Hyperoxaluria Type II | GRHPR | G>A | 0 | Clear |
| Hypertrophic Cardiomyopathy (Discovered in the Ragdoll) | MYBPC | C>T | 0 | Clear |
| Hypotrichosis (Discovered in the Birman) | FOXN1 | Deletion | 0 | Clear |
| Lipoprotein Lipase Deficiency | LPL | G>A | 0 | Clear |
| Mucopolysaccharidosis Type I | IDUA | Deletion | 0 | Clear |
| Mucopolysaccharidosis Type VI | ARSB | T>C | 0 | Clear |
| Mucopolysaccharidosis Type VI Modifier | ARSB | G>A | 0 | Clear |
| Mucopolysaccharidosis Type VII (Variant 1) | GUSB | G>A | 0 | Clear |

DNA Test Report

Other Conditions Tested (continued)

| Genetic Condition | Gene | Risk Variant | Copies | Result |
|--|---------|--------------|--------|--------|
| Mucopolysaccharidosis Type VII (Variant 2) | USB | C>T | 0 | Clear |
| Myotonia Congenita | CLCN1 | G>T | 0 | Clear |
| Progressive Retinal Atrophy (Discovered in the Abyssinian) | CEP290 | T>G | 0 | Clear |
| Progressive Retinal Atrophy (Discovered in the Bengal) | KIF3B | G>A | 0 | Clear |
| Progressive Retinal Atrophy (Discovered in the Persian) | AIPL1 | C>T | 0 | Clear |
| Sphingomyelinosis (Variant 1) | NPC1 | G>C | 0 | Clear |
| Sphingomyelinosis (Variant 2) | NPC2 | G>A | 0 | Clear |
| Vitamin D-Dependent Rickets | CYP27B1 | G>T | 0 | Clear |

Blossom
Registration: N/A
Breed: Maine Coon

Sample ID: FTZMYGX
Test Date: 6/15/2022
Optimal Selection - Feline

DNA Test Report

Blood Type

Blood Type

A
(Most common)

Genotype

A/A

Transfusion Risk

Moderate
Blossom has the most common blood type.
She can be transfused with Type A blood.

Breeding Risk

Low
If breeding, Blossom has a low risk of blood
type incompatibility with nursing kittens.

Variant Tested

b variant 1
b variant 2
b variant 3
c variant - Causes AB Blood Type

Description

(Common b variant)
(Discovered in Turkish breeds)
(Discovered in Ragdolls)
(Discovered in Ragdolls)

Copies

0
0
0
0

DNA Test Report

Coat Color

| Genetic Trait | Gene | Variant | Copies | Result |
|--|------|---------------------|--------|--|
| Charcoal (Discovered in the Bengal) | ASIP | A ^{Pb} | 0 | No effect |
| Solid Color | ASIP | a | 1 | Banded hairs, tabby patterns likely |
| Gloving (Discovered in the Birman) | KIT | w ^g | 0 | No effect |
| Partial and Full White | KIT | W or w ^s | 1 | Partly or fully white coat likely |
| Amber (Discovered in the Norwegian Forest Cat) | MC1R | e | 0 | No effect |
| Russet (Discovered in the Burmese) | MC1R | e ^r | 0 | No effect |
| Dilution | MLPH | d | 0 | No effect |
| Albinism (Discovered in Oriental breeds) | TYR | c ^a | 0 | No effect |
| Colorpoint (Discovered in the Burmese) | TYR | c ^b | 0 | No effect |
| Colorpoint (Discovered in the Siamese) | TYR | c ^s | 0 | No effect |
| Mocha (Discovered in the Burmese) | TYR | c ^m | 0 | No effect |
| Chocolate | TYRP | b | 0 | No effect |
| Cinnamon | TYRP | b ^l | 0 | No effect |

Coat Type

| Genetic Trait | Gene | Variant | Copies | Result |
|--|------|------------------|--------|--------------|
| Long Hair (Discovered in many breeds) | FGF5 | M4 | 0 | No effect |
| Long Hair (Discovered in the Norwegian Forest Cat) | FGF5 | M2 | 0 | No effect |
| Long Hair (Discovered in the Ragdoll and Maine Coon) | FGF5 | M3 | — | Inconclusive |
| Long Hair (Discovered in the Ragdoll) | FGF5 | M1 | 0 | No effect |
| Lykoi Coat (Variant 1) | HR | hr ^{Ca} | 0 | No effect |
| Lykoi Coat (Variant 2) | HR | hr ^{VA} | 0 | No effect |

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Coat Type (continued)

| Genetic Trait | Gene | Variant | Copies | Result |
|---|---------|------------------|--------|-----------|
| Hairlessness (Discovered in the Sphynx) | KRT71 | re ^{hr} | 0 | No effect |
| Rexing (Discovered in the Devon Rex) | KRT71 | re ^{dr} | 0 | No effect |
| Rexing (Discovered in the Cornish Rex and German Rex) | LPAR6 | r | 0 | No effect |
| Glitter | Pending | gl | 0 | No effect |

Tail Length

| Genetic Trait | Gene | Variant | Copies | Result |
|------------------------|------|----------|--------|-----------|
| Short Tail (Variant 3) | HES7 | jb | 0 | No effect |
| Short Tail (Variant 1) | T | C1199del | 0 | No effect |
| Short Tail (Variant 2) | T | T988del | 0 | No effect |

Extra Toes

| Genetic Trait | Gene | Variant | Copies | Result |
|-------------------------|-------|---------|--------|-----------|
| Polydactyly (Variant 1) | LIMB1 | HW | 0 | No effect |
| Polydactyly (Variant 2) | LIMB1 | UK1 | 0 | No effect |
| Polydactyly (Variant 3) | LIMB1 | UK2 | 0 | No effect |