

# DNA Test Report

## Owner Info

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**First Name**

Lana

**Last Name**

Skjolaas

## Pet Info

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**Registered Name**

Mountaineer Gilda

**Date of Birth**

6/14/2018

**Nickname (Call Name)**

Mountaineer Gilda

**Sample ID**

CGVCYZP

**Sex**

Female

**Registration**

N/A

**Microchip ID**

N/A

**Tattoo ID**

N/A

# DNA Test Report

## Ancestry Results

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### Western

43% American Domestic Cat

11% American Curl

### Persian

26% Persian

3% Scottish Fold

### Asian

13% Burmese

### Turkish

4% Turkish Van

# DNA Test Report

## Genetic Diversity (Heterozygosity)

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**Mountaineer Gilda's Percentage of Heterozygosity**

41%

Mountaineer Gilda's genome analysis shows an average level of genetic heterozygosity when compared with other random-bred cats.

**Typical Range for Domestic Cats**

29 - 41%

# DNA Test Report

## Health Conditions Tested

| Genetic Condition   | Gene    | Risk Variant | Copies | Result  |
|---|---------|--------------|--------|---------|
| Factor XII Deficiency (Variant 2)                                       | F12     | Deletion     | 1      | Notable |
| 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   |
| Cystinuria Type B (Variant 1)   | SCL7A9  | C>T          | 0      | Clear   |
| Cystinuria Type B (Variant 2)   | SCL7A9  | G>A          | 0      | Clear   |
| Cystinuria Type B (Variant 3)   | SCL7A9  | T>A          | 0      | Clear   |
| Dihydropyrimidinase Deficiency  | DPYS    | G>A          | 0      | Clear   |
| Earfold and Osteochondrodysplasia (Discovered in the Scottish Fold)     | TRPV4   | G>T          | 0      | Clear   |
| Factor XII Deficiency (Variant 1)                                       | F12     | Deletion     | 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   |

# DNA Test Report

## Health Conditions Tested (continued)

| Genetic Condition  | Gene   | Risk Variant | Copies | Result |
|--|--------|--------------|--------|--------|
| 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   | O>O          | 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 Maine Coon)         | MYBPC  | G>C          | 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  |
| MDR1 Medication Sensitivity  | ABCB1  | Deletion     | 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  |
| Mucopolysaccharidosis Type VII (Variant 2)                         | USB    | C>T          | 0      | Clear  |
| Myotonia Congenita   | CLCN1  | G>T          | 0      | Clear  |
| Polycystic Kidney Disease (PKD)                                    | PKD1   | C>A          | 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  |

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## Health Conditions Tested (continued)

| Genetic Condition                                       | Gene    | Risk Variant | Copies | Result |
|---|---------|--------------|--------|--------|
| Progressive Retinal Atrophy (Discovered in the Persian) | AIPL1   | C>T          | 0      | Clear  |
| Pyruvate Kinase Deficiency                              | PKLR    | G>A          | 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  |

# DNA Test Report

## Blood Type

### Blood Type

A  
(Most common)

### Genotype

A/A

### Transfusion Risk

Moderate

Mountaineer Gilda has the most common blood type. She can be transfused with Type A blood.

### Breeding Risk

Low

If breeding, Mountaineer Gilda has a low risk of blood type incompatibility with nursing kittens.

### Variant Tested

### Description

### Copies

b variant 1

(Common b variant)

0

b variant 2

(Discovered in Turkish breeds)

0

b variant 3

(Discovered in Ragdolls)

0

c variant - Causes AB Blood Type

(Discovered in Ragdolls)

0

# DNA Test Report

## Coat Color

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

## Coat Type

| Genetic Trait  | Gene         | Variant          | Copies | Result                                       |
|--|--------------|------------------|--------|--|
| Glitter  | Confidential | —                | 0      | No effect                                    |
| Long Hair (Discovered in many breeds)                | FGF5         | M4               | 1      | <b>Long coat possible, short coat likely</b> |
| Long Hair (Discovered in the Norwegian Forest Cat)   | FGF5         | M2               | 0      | No effect                                    |
| Long Hair (Discovered in the Ragdoll and Maine Coon) | FGF5         | M3               | 0      | No effect                                    |
| Long Hair (Discovered in the Ragdoll)                | FGF5         | M1               | 0      | No effect                                    |
| Lykoi Coat (Variant 1)                               | HR           | hr <sup>Ca</sup> | 0      | No effect                                    |
| Lykoi Coat (Variant 2)                               | HR           | hr <sup>VA</sup> | 0      | No effect                                    |



# DNA Test Report

## Coat Type (continued)

| Genetic Trait   | Gene  | Variant          | Copies | Result    |
|---|-------|------------------|--------|-----------|
| Hairlessness (Discovered in the Sphynx)               | KRT71 | re <sup>hr</sup> | 0      | No effect |
| Rexing (Discovered in the Devon Rex)                  | KRT71 | re <sup>dr</sup> | 0      | No effect |
| Rexing (Discovered in the Cornish Rex and German Rex) | LPAR6 | r                | 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) | LIMBR1 | HW      | 0      | No effect |
| Polydactyly (Variant 2) | LIMBR1 | UK1     | 0      | No effect |
| Polydactyly (Variant 3) | LIMBR1 | UK2     | 0      | No effect |