FamilytimeRags Black Pearl Registration: 0463-02758940

Breed: Ragdoll

Microchip Number: 985112009274125

# **DNA Test Report**

Sample ID: FQYJTKB Test Date: 5/16/2024 Optimal Selection - Feline

#### Owner Info

First Name
Stormi
Last Name
Nell

#### Pet Info

Registered NameDate of BirthFamilytimeRags Black Pearl1/14/2018Nickname (Call Name)Sample IDFamilytimeRags Black PearlFQYJTKB

 Sex
 Registration

 Female
 0463-02758940

Country of OriginMicrochip IDUS985112009274125

US 98511200927412
Owner Reported Breed Tattoo ID

Ragdoll

FamilytimeRags Black Pearl

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#### Genetic Diversity (Heterozygosity)

FamilytimeRags Black Pearl's Percentage of Heterozygosity

35%

FamilytimeRags Black Pearl's genome analysis shows an average level of genetic heterozygosity when compared with other Ragdolls.

Typical Range for Ragdolls

32 - 37%

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#### Health Conditions Known in This Breed

| Genetic Condition                                       | Gene  | Risk Variant | Copies | Result  |
|---|-------|--------------|--------|---------|
| Factor XII Deficiency (Variant 2)                       | F12   | Deletion     | 1      | Notable |
| Factor XII Deficiency (Variant 1)                       | F12   | Deletion     | 0      | Clear   |
| Hypertrophic Cardiomyopathy (Discovered in the Ragdoll) | MYBPC | C>T          | 0      | Clear   |
| Polycystic Kidney Disease (PKD)                         | PKD1  | C>A          | 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  |
| 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  |

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#### Other Conditions Tested (continued)

| Genetic Condition  | Gene  | Risk Variant | Copies | Result |
|--|-------|--------------|--------|--------|
| 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 Maine Coon)             | MYBPC | G>C          | 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  |

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#### Other Conditions Tested (continued)

| Genetic Condition  | Gene    | Risk Variant | Copies | Result |
|--|---------|--------------|--------|--------|
| 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  |
| Pyruvate Kinase Deficiency                                 | PKLR    | G>A          | 0      | Clear  |
| Sphingomyelinosis (Variant 1)                              | NPC1    | G>C          | 0      | Clear  |
| Sphingomyelinosis (Variant 2)                              | NPC2    | G>A          | 0      | Clear  |
| Spinal Muscular Atrophy (Discovered in the Maine Coon)     | LIX1    | Deletion     | 0      | Clear  |
| Vitamin D-Dependent Rickets                                | CYP27B1 | G>T          | 0      | Clear  |

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# **DNA Test Report**

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#### Blood Type

**Blood Type** Genotype В b/b (Rare)

**Transfusion Risk** 

High FamilytimeRags Black Pearl has a less common blood type. She can only be transfused with Type B blood.

**Breeding Risk** 

High

If FamilytimeRags Black Pearl's kittens are blood type A or AB, they must be foster nursed or bottle fed for the first 24 hours after birth.

| 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)       | 2      |
| c variant - Causes AB Blood Type | (Discovered in Ragdolls)       | 0      |

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#### Sample ID: FQYJTKB Test Date: 5/16/2024 Optimal Selection - Feline

# **DNA Test Report**

| Coat | $\cap$                      | lヘr  |
|------|-----------------------------|------|
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| Genetic Trait                                  | Gene | Variant             | Copies | Result                            |
|--|------|---------------------|--------|-----------------------------------|
| Charcoal (Discovered in the Bengal)            | ASIP | A <sup>Pb</sup>     | 0      | No effect                         |
| Solid Color                                    | ASIP | а                   | 2      | Solid color hairs likely          |
| Gloving (Discovered in the Birman)             | KIT  | $\mathbf{w}_{a}$    | 1      | No effect                         |
| Partial and Full White                         | KIT  | W or w <sup>s</sup> | 1      | Partly or fully white coat likely |
| Amber (Discovered in the Norwegian Forest Cat) | MC1R | е                   | 0      | No effect                         |
| Russet (Discovered in the Burmese)             | MC1R | e <sup>r</sup>      | 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                   | 0      | No effect                         |
| Colorpoint (Discovered in the Siamese)         | TYR  | c°                  | 2      | Siamese colorpoint pattern likely |
| Mocha (Discovered in the Burmese)              | TYR  | c <sup>m</sup>      | 0      | No effect                         |
| Chocolate                                      | TYRP | b                   | 0      | No effect                         |
| Cinnamon                                       | TYRP | b                   | 0      | No effect                         |

## Coat Type

| Genetic Trait  | Gene         | Variant          | Copies | Result           |
|--|--------------|------------------|--------|------------------|
| Glitter  | Confidential | _                | 0      | No effect        |
| Long Hair (Discovered in many breeds)                | FGF5         | M4               | 2      | Long coat likely |
| Long Hair (Discovered in the Norwegian Forest Cat)   | FGF5         | M2               | 0      | No effect        |
| Long Hair (Discovered in the Ragdoll and Maine Coon) | FGF5         | МЗ               | 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        |

## **¾** WISDOM PANEL™

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## Coat Type (continued)

| Genetic Trait   | Gene  | Variant          | Copies | Result    |
|---|-------|------------------|--------|-----------|
| Lykoi Coat (Variant 2)                                | HR    | hr <sup>VA</sup> | 0      | No effect |
| 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) | Т    | C1199del | 0      | No effect |
| Short Tail (Variant 2) | Т    | 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 |