# ✗ WISDOM PANEL™

# **DNA** Test Report

#### Sample ID: FLYZVFG Test Date: 8/22/2023 Optimal Selection - Feline

| Owner Info           |               |  |
|----------------------|---------------|--|
| First Name           | Last Name     |  |
| Tim                  | Cramer        |  |
| Pet Info             |               |  |
| Registered Name      | Date of Birth |  |
| Luchadora            | 4/16/2023     |  |
| Nickname (Call Name) | Sample ID     |  |
| Luchadora            | FLYZVFG       |  |
| Sex                  | Registration  |  |
| Female               | N/A           |  |
| Country of Origin    | Microchip ID  |  |
| US                   | N/A           |  |
| Owner Reported Breed | Tattoo ID     |  |
| Bengal               | N/A           |  |

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#### Genetic Diversity (Heterozygosity)

#### Luchadora's Percentage of Heterozygosity

32%

Luchadora's genome analysis shows an average level of genetic heterozygosity when compared with other Bengals.

**Typical Range for Bengals** 31 - 36%

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#### Health Conditions Known in This Breed

| 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   |
| Pyruvate Kinase Deficiency  | PKLR    | G>A          | 0      | Clear   |
| Other 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   |

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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  |
| 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  |
| 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  |
| 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  |

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## 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  |
| Polycystic Kidney Disease (PKD)                         | PKD1    | C>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  |
| 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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| Blood Type  |   |        |
|---|---|--------|
| Blood Type  | Genotype  |        |
| A   | A/A   |        |
| (Most common)   |   |        |
| Transfusion Risk  | Breeding Risk   |        |
| Moderate  | Low   |        |
| Luchadora has the most common blood type.<br>She can be transfused with Type A blood. | If breeding, Luchadora 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      |

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#### Sample ID: FLYZVFG Test Date: 8/22/2023 **Optimal Selection - Feline**

# Coat Color

| Genetic Trait                                     | Gene | Variant             | Copies | Result                              |
|---|------|---------------------|--------|-------------------------------------|
| Charcoal (Discovered in the Bengal)               | ASIP | A <sup>Pb</sup>     | 0      | No effect                           |
| Solid Color                                       | ASIP | а                   | 0      | Banded hairs, tabby patterns likely |
| Gloving (Discovered in the Birman)                | KIT  | w <sup>g</sup>      | 0      | No effect                           |
| Partial and Full White                            | KIT  | W or w <sup>s</sup> | 0      | No effect                           |
| Amber (Discovered in the Norwegian<br>Forest Cat) | MC1R | e                   | 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  | cª                  | 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>      | 1      | Colorpoints possible                |
| 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 | -                | 1      | No effect |
| Long Hair (Discovered in many breeds)                   | FGF5         | M4               | 0      | No effect |
| Long Hair (Discovered in the Norwegian<br>Forest Cat)   | FGF5         | M2               | 0      | No effect |
| Long Hair (Discovered in the Ragdoll and<br>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 |

## 

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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<br>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 |