WISDOM PANEL™

DNA Test Report

Owner Info

First Name
Dorothy Elizabeth

Last Name
Boatwright

Pet Info

Registered Name
Fuzzybunz Shug of Masterpiecerags

Nickname (Call Name)
Shuggy

Sex
Female

Date of Birth
3/4/2022

Sample ID
CJHPCLN

Registration
Fuzzybunz Shug of Masterpiecerags

Microchip ID
N/A

Tattoo ID
N/A

DNA Test Report

Ancestry Results

Western

58% Ragdoll

13% American Domestic Cat

Asian

13% Birman

Persian

12% Persian

Siamese and oriental

4% Siamese and Oriental Shorthair

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Genetic Diversity (Heterozygosity)

Shuggy's Percentage of Heterozygosity

36%

Shuggy'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

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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	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
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

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Blood Type

Blood Type

A

(Most common)

Genotype

A/b

(Carrier for Blood Type B)

Transfusion Risk

Moderate

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

Breeding Risk

Low

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

Variant Tested	Description	Copies
b variant 1	(Common b variant)	**1**
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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Coat Color

Genetic Trait	Gene	Variant	Copies	Result
Charcoal (Discovered in the Bengal)	ASIP	A^{Pb}	0	No effect
Solid Color	ASIP	**a**	**2**	**Solid color hairs likely**
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**	**2**	**Lightened coat color likely**
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}**	**2**	**Siamese colorpoint pattern likely**
Mocha (Discovered in the Burmese)	TYR	c^{m}	0	No effect
Chocolate	TYRP	**b**	**2**	**Chocolate coat color likely**
Cinnamon	TYRP	b^{l}	0	No effect

Coat Type

Genetic Trait	Gene	Variant	Copies	Result
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	M3	0	No effect
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
Hairlessness (Discovered in the Sphynx)	KRT71	re^{hr}	0	No effect

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Coat Type (continued)

Genetic Trait	Gene	Variant	Copies	Result
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)	LIMBR1	HW	0	No effect
Polydactyly (Variant 2)	LIMBR1	UK1	0	No effect
Polydactyly (Variant 3)	LIMBR1	UK2	0	No effect