Demographic Information

Call Name	**Sadie**	**DOB**	**March 2, 2023**
Registered Name	**Sadie**	**Registration #**	**-**
Breed	**Ragdoll**	**Tattoo**	**-**
Sex	**Female**	**Microchip**	**-**
Owner	**Pamela Banta**	**Laboratory #**	**401966**
		Report Date	**June 6, 2023**

These tests were developed and performed by Paw Print Genetics®, Spokane WA.

Explanation of Results

Normal	A 'Normal' result means that your cat does not have the mutation that causes the associated genetic disease.
Carrier	A 'Carrier' result indicates that your cat has inherited one copy of the mutation that has been reported to cause this genetic disease. Your cat may not be clinically affected by this mutation because two copies of the mutation are usually required to cause disease.
Carrier / At–Risk	A 'Carrier / At–Risk' result indicates that your cat inherited one copy of the mutation that has been reported to cause this genetic disease. Based on the mode of genetic inheritance for this particular disease, inheriting one mutant copy of the gene may result in the disease. Cats with one copy of the mutation may have a milder phenotype as compared to cats with two copies of this mutation.
At–Risk / Affected	An 'At–Risk / Affected' result indicates that your cat inherited one or two copies of the mutation that has been reported to cause this genetic disease. Based on the mode of genetic inheritance for this particular disease, inheriting one or two mutant copies of the gene may result in the disease.

No Result	'No Result' indicates that we were unable to obtain a genotype for your cat for this specific disease or trait and does not mean that your cat is a carrier or at-risk for this disease. There are a variety of reasons why a specific test may not provide a reportable result. Unique variations in the genetic code of some individuals may exist and cause certain regions of the genome to not perform properly with a specific test. In addition, suboptimal sampling of the cat's cheek cells could also result in poor sample performance due to inadequate cell counts, bacterial and fungal growth, or the presence of other test inhibitors. An acceptable level of tests with no results has been determined by Paw Print Genetics. Cats with at least 90% of the test results are determined to be acceptable and reportable. If your cat has an unacceptable level of tests with no results, you will be contacted for a new sample to repeat the testing.

Please review our testing terms and disclaimers regarding your results.

WT: wild type (normal) M: mutant Y: Y chromosome (male)

Breed Profile

Disease Name	Genotype	Interpretation
Hypertrophic Cardiomyopathy (Ragdoll Type)	WT/WT	Normal (Clear)
Mucopolysaccharidosis Type VI (Modifier)	WT/WT	Normal (Clear)
Polycystic Kidney Disease	WT/WT	Normal (Clear)

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Coat Colors & Traits

Trait Name	Genotype	Interpretation
ABC Blood Group System	A/A	A blood group
ABC Locus - B Group Variant 1 - b^1	0	
ABC Locus - B Group Variant 2 - b^2	0	
ABC Locus - B Group Variant 3 - b^3	0	
ABC Locus - C Group Variant - a^c	0	
Agouti Coat Color - A Locus	a/a	Solid - No tabby expression allowed
Amber and Russet Coat Color - E Locus	E/E	Non-amber, darkly pigmented coat color

E Locus - Amber Variant - e	0	
E Locus - Russet Variant - e^{r}	0	
Brown Coat Color - B Locus	**B/b^{1}**	**Black coat color (cinnamon, red carrier)**
B Locus - Cinnamon Variant - b^{1}	1	
B Locus - Chocolate Variant - b	0	
Coat Type - Curly (Devon Rex, Selkirk Rex Type) or Hairless (Sphynx Type) - R Locus	**R/R**	**Straight coat**
R Locus - Selkirk Rex Curly Variant - SR	0	
R Locus - Devon Rex Curly Variant - re	0	
R Locus - Sphynx Hairless Variant - hr	0	
Curly Coat (Cornish Rex Type)	**Cu/Cu**	**Straight coat**
Dilute Coat Color - D Locus	**D/d**	**Non-dilute (dilute carrier)**
Dominant White and White Spotting - W Locus	**W or w^{s}/w**	**White coat color (W/w) or white spotting (w^{s}/w) (carrier for non-white)**
Folded Ears with Osteochondrodysplasia	**f/f**	**Typical (non-folded) ears**
Golden/Sunshine Coat (Siberian Type) - Wb Locus	**Wb/Wb**	**Non-sunshine tabby**
Hairlessness (Lykoi Type) - Hr Locus	**Hr/Hr**	**Normal hair**
Hairlessness (Lykoi Type) - Hr Locus - hr^{Ca}	0	
Hairlessness (Lykoi Type) - Hr Locus - hr^{Fr}	0	
Hairlessness (Lykoi Type) - Hr Locus - hr^{NC}	0	
Hairlessness (Lykoi Type) - Hr Locus - hr^{TN}	0	
Hairlessness (Lykoi Type) - Hr Locus - hr^{TX}	0	
Hairlessness (Lykoi Type) - Hr Locus - hr^{VA}	0	

Long Hair - L Locus	**lh^3/lh^4**	**Longhaired**
L Locus - Long Hair Variant 1 - $M1/lh^1$	0	
L Locus - Long Hair Variant 2 - $M2/lh^2$	0	
L Locus - Long Hair Variant 3 - $M3/lh^3$	1	
L Locus - Long Hair Variant 4 - $M4/lh^4$	1	
L Locus - Long Hair Variant 5 - $M5/lh^5$	0	
Pointed Coat Color and Albinism - C Locus	**c^s/c^s**	**Siamese points**
C Locus - Siamese Variant - c^s	2	
C Locus - Burmese Variant - c^b	0	
C Locus - Albino Variant - c	0	
C Locus - Albino Variant 2 - c^2	0	
Polydactyly	**pd/pd**	**Normal (typical) toes**
Polydactyly - Variant 1 - PD^1	0	
Polydactyly - Variant 2 - PD^2	0	
Polydactyly - Hemingway Variant - PD^H	0	
Short Tail (Bobtail) - T Locus	**t/t**	**Normal length tail**
Short Tail (Bobtail) - T Locus - T^1	0	
Short Tail (Bobtail) - T Locus - T^2	0	
Short Tail (Bobtail) - T Locus - T^3	0	
Short Tail (Japanese Bobtail Type)	**st/st**	**Normal length tail**
Tabby Coat Color Pattern - Mc Locus	**mc^1/mc^1**	**Blotched (classic) tabby coat color pattern**
Mc Locus - Blotched Variant 1 - mc^1	2	
Mc Locus - Blotched Variant 2 - mc^2	0	
Mc Locus - Blotched Variant 3 - mc^3	No Result	

Ticked - Ti Locus	ti+/ti+	Non-ticked tabby
Ticked - Ti Locus - Ti^1	0	
Ticked - Ti Locus - Ti^2	0	
White Gloves (Birman Type)	**w^g/N**	**No white gloves (carrier for gloves)**

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Determinants of coat colors and traits are complex. Many of these variants are known and many of the genes screened in the CatScan interact. In addition, not all the genetic factors that contribute to a cat's coat color and traits are known. Because of the complexities in gene-gene interactions, the coat colors and traits reported in your CatScan results may vary from your cat's actual appearance. Individual differences in genes throughout the feline genome, not tested in this genetic screen, may also affect the final coat color or traits seen in your cat.

The ABC Blood Group System interpretation is based off of four variants (b^1, b^2, b^3, and a^c). Definitive bloodtyping should be done by agglutination or other similar testing methods.

Diseases

Disease Name	Genotype	Interpretation
Acute Intermittent Porphyria, Variant 1	**WT/WT**	Normal (Clear)
Acute Intermittent Porphyria, Variant 2	**WT/WT**	Normal (Clear)
Acute Intermittent Porphyria, Variant 3	**WT/WT**	Normal (Clear)
Acute Intermittent Porphyria, Variant 4 (Siamese Type 1)	**WT/WT**	Normal (Clear)
Acute Intermittent Porphyria, Variant 5 (Siamese Type 2)	**WT/WT**	Normal (Clear)
Acute Intermittent Porphyria, Variant 6	**WT/WT**	Normal (Clear)
Alpha Mannosidosis	**WT/WT**	Normal (Clear)
Autoimmune Lymphoproliferative Syndrome	**WT/WT**	Normal (Clear)
Brachycephaly (Burmese Type)	**WT/WT**	Normal (Clear)
Congenital Adrenal Hyperplasia	**WT/WT**	Normal (Clear)

Congenital Erythropoietic Porphyria, Variant 1	WT/WT	Normal (Clear)
Congenital Erythropoietic Porphyria, Variant 2	WT/WT	Normal (Clear)
Congenital Hypothyroidism	WT/WT	Normal (Clear)
Congenital Myasthenic Syndrome	WT/WT	Normal (Clear)
Cystinuria, Type 1A	WT/WT	Normal (Clear)
Cystinuria, Type B, Variant 1	WT/WT	Normal (Clear)
Cystinuria, Type B, Variant 2	WT/WT	Normal (Clear)
Cystinuria, Type B, Variant 3	WT/WT	Normal (Clear)
Cystinuria, Type B, Variant 4	WT/WT	Normal (Clear)
Cystinuria, Type B, Variant 5	WT/WT	Normal (Clear)
Dihydropyrimidinase Deficiency	WT/WT	Normal (Clear)
Epidermolysis Bullosa Simplex	WT/WT	Normal (Clear)
Factor XII Deficiency, Variant 1	WT/WT	Normal (Clear)
Factor XII Deficiency, Variant 2	M/M	At-Risk/Affected
Factor XII Deficiency, Variant 3	WT/WT	Normal (Clear)
Feline Immunodeficiency Virus (FIV) Infection Risk Modifier	WT/WT	No Increased Resistance to FIV Infection
Feline Leukocyte Adhesion Deficiency, Type 1	WT/WT	Normal (Clear)
Feline Niemann-Pick Disease	WT/WT	Normal (Clear)
Feline Spongy Encephalopathy	WT/WT	Normal (Clear)

Forebrain Commissural Malformation	**WT/WT**	Normal (Clear)
Gangliosidosis GM2A	**WT/WT**	Normal (Clear)
Glycogen Storage Disease, Type IV	**WT/WT**	Normal (Clear)
GM1 Gangliosidosis	**WT/WT**	Normal (Clear)
GM2 Gangliosidosis, Type II (Burmese Type)	**WT/WT**	Normal (Clear)
GM2 Gangliosidosis, Type II	**WT/WT**	Normal (Clear)
GM2 Gangliosidosis, Type II (Japanese Domestic Type)	**WT/WT**	Normal (Clear)
GM2 Gangliosidosis, Type II (Korat Type)	**WT/WT**	Normal (Clear)
Hemophilia B, Variant 1	**WT/WT**	X-Linked Female Normal
Hemophilia B, Variant 2	**WT/WT**	X-Linked Female Normal
Hyperlipoproteinemia	**WT/WT**	Normal (Clear)
Hypertrophic Cardiomyopathy (Maine Coon Type)	**WT/WT**	Normal (Clear)
Hypertrophic Cardiomyopathy (Ragdoll Type)	**WT/WT**	Normal (Clear)
Hypertrophic Cardiomyopathy (Sphynx Type Risk Factor)	**WT/WT**	Normal (Clear)
Hypogonadotropic Hypogonadism	**WT/WT**	Normal (Clear)
Hypokalemic Periodic Paralysis	**WT/WT**	Normal (Clear)
Hypotrichosis with Short Life Expectancy	**WT/WT**	Normal (Clear)
Inflammatory Linear Verrucous Epidermal Nevus	**WT/WT**	X-Linked Female Normal
L-2-Hydroxyglutaric Aciduria	**WT/WT**	Normal (Clear)
Methemoglobinemia, Variant 1	**WT/WT**	Normal (Clear)

Methemoglobinemia, Variant 2	**WT/WT**	Normal (Clear)
Mucolipidosis II	**WT/WT**	Normal (Clear)
Mucopolysaccharidosis Type I	**WT/WT**	Normal (Clear)
Mucopolysaccharidosis Type VI (Modifier)	**WT/WT**	Normal (Clear)
Mucopolysaccharidosis Type VI (Siamese Type)	**WT/WT**	Normal (Clear)
Mucopolysaccharidosis Type VII, Variant 1	**WT/WT**	Normal (Clear)
Mucopolysaccharidosis Type VII, Variant 2	**WT/WT**	Normal (Clear)
Multiple Drug Resistance	**WT/WT**	Normal (Clear)
Myotonia Congenita	**WT/WT**	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 6	**WT/WT**	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 7, Variant 1	**WT/WT**	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 7, Variant 2	**WT/WT**	Normal (Clear)
Niemann-Pick C1 Disease, Variant 1	**WT/WT**	Normal (Clear)
Niemann-Pick C1 Disease, Variant 2	**WT/WT**	Normal (Clear)
Niemann-Pick C2 Disease	**WT/WT**	Normal (Clear)
Oculocutaneous Albinism	**WT/WT**	Normal (Clear)
Polycystic Kidney Disease	**WT/WT**	Normal (Clear)
Polycystic Kidney Disease (Siberian Type)	**WT/WT**	Normal (Clear)
Primary Congenital Glaucoma	**WT/WT**	Normal (Clear)
Primary Hyperoxaluria Type II	**WT/WT**	Normal (Clear)

Progressive Retinal Atrophy (Abyssinian Type)	**WT/WT**	Normal (Clear)
Progressive Retinal Atrophy (Bengal Type)	**WT/WT**	Normal (Clear)
Progressive Retinal Atrophy (Persian Type)	**WT/WT**	Normal (Clear)
Pyruvate Kinase Deficiency	**WT/WT**	Normal (Clear)
Rod-Cone Dysplasia	**WT/WT**	Normal (Clear)
Spinal Muscular Atrophy	**WT/WT**	Normal (Clear)
Vitamin D-Dependent Rickets Type IB	**WT/WT**	Normal (Clear)
Vitamin D-dependent Rickets, Type IA, Variant 1	**WT/WT**	Normal (Clear)
Vitamin D-dependent Rickets, Type IA, Variant 2	**WT/WT**	Normal (Clear)

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CatScan® is a product of Paw Print Genetics®. This test was developed and its performance determined by Paw Print Genetics. This laboratory has established and verified the test's accuracy and precision with >99% sensitivity and specificity. The results included in this report relate only to the items tested using the sample provided. The presence of mosaicism may not be detected by this test. Non-paternity may lead to unexpected results. This is not a diagnostic test. This is not a breed identification test. Because all tests performed are DNA-based, rare genomic variations may interfere with the performance of some tests producing false results. If you think any results are in error, please contact the laboratory for further evaluation.