

Demographic Information

Call Name	Bee	DOB	July 2, 2023
Registered Name	Irish Snowflake Bee	Registration #	SBV070223017
Breed	British Shorthair	Tattoo	
Sex	Female	Microchip	981098108631377
Owner	Danijel Tuskan	Laboratory #	429722
		Report Date	January 22, 2024

These tests were developed and performed by Paw Print Genetics[®], Lincoln, NE.

Explanation of Results

A 'Normal' result means that your cat does not have the mutation that causes the associated genetic disease.
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.
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 phenotyp as compared to cats with two copies of this mutation.
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 or genetic inheritance for this particular disease, inheriting one or two mutant copies of the gene may result in the disease.
'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.
w our testing terms and disclaimers regarding your results.

Breed Profile

Disease Name	Geno.	Interpretation
Autoimmune Lymphoproliferative Syndrome (Cat)	WT/WT	Normal (Clear)
Mucopolysaccharidosis Type VI (Modifier) (Cat)	WT/WT	Normal (Clear)
Progressive Retinal Atrophy (Persian Type) (Cat)	WT/WT	Normal (Clear)
	WT: (wild type (normal))	M: mutant Y: Y chromosome (male)

Coat Colors & Traits

Trait Name	Geno.	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	Tabby expression allowed
A Locus - Non-Agouti (Solid) Variant - a	0	
A Locus - Charcoal (Bengal Type, Variant 1)	0	
A Locus - Charcoal (Bengal Type, Variant 2)	0	
A Locus - Charcoal (Bengal Type, Variant 4)	0	
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	Black Coat Color
B Locus - Cinnamon Variant - b ¹	0	
B Locus - Chocolate Variant - b	0	
<u>Coat Type - Curly (Devon Rex, Selkirk Rex Type) or</u> <u>Hairless (Sphynx Type) - R Locus</u>	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	
<u>Curly Coat (Cornish Rex Type)</u>	Cu/Cu	Straight coat
Dilute Coat Color - D Locus	D/D	Non-dilute
Dominant White and White Spotting - W Locus	w/w	No white spotting
Folded Ears with Osteochondrodysplasia	f/f	Typical (non-folded) ears
<u>Golden/Sunshine Coat (Siberian Type) - Wb Locus</u>	Wb/Wb	Non-sunshine tabby

<u> Hairlessness (Lykoi Type) - Hr Locus</u>	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	Sh/lh ⁴	Shorthaired (long hair carrier)
L Locus - Long Hair Variant 1 - M1/lh ¹	0	
L Locus - Long Hair Variant 2 - M2/lh ²		
L Locus - Long Hair Variant 2 - M2/In ² L Locus - Long Hair Variant 3 - M3/Ih ³	0	
L Locus - Long Hair Variant 3 - M3/in° 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	
Sex Determination	X/X	Female
<u>Short Tail (Bobtail) - T Locus</u>	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	
<u>Short Tail (Japanese Bobtail Type)</u>	st/st	Normal length tail
<u> Fabby Coat Color Pattern - Mc Locus</u>	Mc/Mc	Mackerel (wildtype) tabby coat color pattern
Mc Locus - Blotched Variant 1 - mc ¹	0	
Mc Locus - Blotched Variant 1 - mc ² Mc Locus - Blotched Variant 2 - mc ²	0	
Mc Locus - Blotched Variant 2 - mc ² Mc Locus - Blotched Variant 3 - mc ³	0	
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<u> Ticked - Ti Locus</u>	Ti ² /ti+	Ticked tabby (non- ticked tabby carrier)
Ticked - Ti Locus - Ti ¹	0	
Ticked - Ti Locus - Ti ²	1	
<u>White Gloves (Birman Type)</u>	N/N	No white gloves
	WT- wild true (non	mal) M: mutant V: V abromana (mala)
	WT: (wild type (nor	rmal) M: (mutant) Y: (Y chromosome (r

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 the three variants (b^1, b^2 and a^c). Other blood group variants have been identified and associated with specific breeds, such as Ragdoll. Definitive bloodtyping should be done by agglutination or other similar testing methods.

Diseases

Disease Name	Geno.	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)
<u>Acute Intermittent Porphyria, Variant 4 (Siamese Type 1)</u>	WT/WT	Normal (Clear)
<u>Acute Intermittent Porphyria, Variant 5 (Siamese Type 2)</u>	WT/WT	Normal (Clear)
Acute Intermittent Porphyria, Variant 6	WT/WT	Normal (Clear)
<u>Alpha Mannosidosis</u>	WT/WT	Normal (Clear)
Autoimmune Lymphoproliferative Syndrome	WT/WT	Normal (Clear)
<u>Brachycephaly (Burmese Type)</u>	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)
<u>Cystinuria, Type 1A</u>	WT/WT	Normal (Clear)
<u>Cystinuria, Type B, Variant 1</u>	WT/WT	Normal (Clear)
<u>Cystinuria, Type B, Variant 2</u>	WT/WT	Normal (Clear)
<u>Cystinuria, Type B, Variant 3</u>	WT/WT	Normal (Clear)
<u>Cystinuria, Type B, Variant 4</u>	WT/WT	Normal (Clear)
<u>Cystinuria, Type B, Variant 5</u>	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	WT/WT	Normal (Clear)
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)
<u>Glycogen Storage Disease, Type IV</u>	WT/WT	Normal (Clear)
GM1 Gangliosidosis	WT/WT	Normal (Clear)
<u>GM2 Gangliosidosis, Type II (Burmese Type)</u>	WT/WT	Normal (Clear)
<u>GM2 Gangliosidosis, Type II</u>	WT/WT	Normal (Clear)
<u>GM2 Gangliosidosis, Type II (Japanese Domestic Type)</u>	WT/WT	Normal (Clear)

<u>GM2 Gangliosidosis, Type II (Korat Type)</u>	WT/WT	Normal (Clear)
<u>Hemophilia B, Variant 1</u>	WT/WT	X-Linked Female Normal
<u>Hemophilia B, Variant 2</u>	WT/WT	X-Linked Female Normal
<u>Hyperlipoproteinemia</u>	WT/WT	Normal (Clear)
Hypertrophic Cardiomyopathy (Maine Coon Type)	WT/WT	Normal (Clear)
Hypertrophic Cardiomyopathy (Ragdoll Type)	WT/WT	Normal (Clear)
<u>Hypertrophic Cardiomyopathy (Sphynx Type Risk</u> <u>Factor)</u>	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)
<u>Mucopolysaccharidosis Type VI (Siamese Type)</u>	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)

WT: wild type (normal)

Y: Y chromosome (male)

Helm Shit Chap

Helen F Smith, PhD

Associate Laboratory Director

M: mutant

Christina J Ramirez, PhD, DVM, DACVP

Medical Director

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. Because all tests are preformed are DNA-based, rare genomic variations may interfere with the performance of some tests producing false results. If you think these results are in error, please contact the laboratory for further evaluation.