

## **Customer & Pet Information**

Call Name	Winter	DOB	March 6, 2023
Registered Name	Martelliacoon Winter Iris	Registration #	SBV 030623 022
Breed	Maine Coon	Tattoo	-
Sex	Female	Microchip	-
Ordered By	Nadine Cull	Laboratory #	440677
	1	Report Date	April 3, 2024

WT: (wild type (normal))

M: (mutant) Y: (Y chromosome (male))

Breed Profile		
Disease Name	Genotype	Interpretation
Cystinuria, Type B, Variant 2	WT/WT	Normal (Clear)
Hypertrophic Cardiomyopathy (Maine Coon Type)	WT/WT	Normal (Clear)
Pyruvate Kinase Deficiency	WT/WT	Normal (Clear)
Spinal Muscular Atrophy	WT/WT	Normal (Clear)
	WT: (wild type (normal))	1: mutant Y: (Y chromosome (male))

## **Coat Colors & Traits**

Trait Name	Genotype	Interpretation
ABC Blood Group System	A/A	A blood group
ABC Locus - B Group Variant 1 - b <sup>1</sup>	0	
ABC Locus - B Group Variant 2 - b <sup>2</sup>	0	
ABC Locus - B Group Variant 3 - b <sup>3</sup>	0	
ABC Locus - C Group Variant - a <sup>c</sup>	0	

Agouti Coat Color - A Locus	A/a	Tabby expression allowed (Solid carrier)
A Locus - Non-Agouti (Solid) Variant - a	1	
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 <sup>r</sup>	0	
Brown Coat Color - B Locus	B/B	Black Coat Color
B Locus - Cinnamon Variant - b <sup>1</sup>	0	
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
Dominant White and White Spotting - W Locus	w/w	No white spotting
Dominant White and White Spotting - W Locus Folded Ears with Osteochondrodysplasia	w/w f/f	No white spotting Typical (non-folded) ears

Hairlessness (Lykoi Type) - Hr Locus - hr <sup>Ca</sup>	0	
Hairlessness (Lykoi Type) - Hr Locus - hr <sup>Fr</sup>	0	
Hairlessness (Lykoi Type) - Hr Locus - hr <sup>NC</sup>	0	
Hairlessness (Lykoi Type) - Hr Locus - hr <sup>TN</sup>	0	
Hairlessness (Lykoi Type) - Hr Locus - hr <sup>TX</sup>	0	
Hairlessness (Lykoi Type) - Hr Locus - hr <sup>VA</sup>	0	
Long Hair - L Locus	lh <sup>4</sup> /lh <sup>4</sup>	Longhaired
L Locus - Long Hair Variant 1 - M1/lh <sup>1</sup>	0	
L Locus - Long Hair Variant 2 - M2/lh <sup>2</sup>	0	
L Locus - Long Hair Variant 3 - M3/lh <sup>3</sup>	0	
L Locus - Long Hair Variant 4 - M4/lh <sup>4</sup>	2	
L Locus - Long Hair Variant 5 - M5/lh <sup>5</sup>	0	
Pointed Coat Color and Albinism - C Locus	C/C	Non-pointed coat
C Locus - Siamese Variant - c <sup>s</sup>	0	
C Locus - Burmese Variant - c <sup>b</sup>	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 <sup>1</sup>	0	
Polydactyly - Variant 2 - PD <sup>2</sup>	0	
Polydactyly - Hemingway Variant - PD <sup>H</sup>	0	
Sex Determination	X/X	Female

Short Tail (Bobtail) - T Locus - T <sup>1</sup>	0	
Short Tail (Bobtail) - T Locus - T <sup>2</sup>	0	
Short Tail (Bobtail) - T Locus - T <sup>3</sup>	0	
Short Tail (Japanese Bobtail Type)	st/st	Normal length tail
Fabby Coat Color Pattern - Mc Locus	mc <sup>1</sup> /mc <sup>1</sup>	Blotched (classic) tabby coat color pattern
Mc Locus - Blotched Variant 1 - mc <sup>1</sup>	2	
Mc Locus - Blotched Variant 2 - mc <sup>2</sup>	0	
Mc Locus - Blotched Variant 3 - mc <sup>3</sup>	0	
licked - Ti Locus	ti+/ti+	Non-ticked tabby
Ticked - Ti Locus - Ti <sup>1</sup>	0	
Ticked - Ti Locus - Ti <sup>2</sup>	0	
Vhite Gloves (Birman Type)	N/N	No white gloves
	WT: (wild type (normal))	M: mutant Y: (Y chromosome (male))

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 blood typing should be done by agglutination or other similar testing methods.

## **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.

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. 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 rev	iew our testing terms and disclaimers regarding your results.