



## Preliminary Research Report

### Results for Lady D

Call Name:	Lady D	Owner:	Galina Bolshoy
Registered Name:	BolshoyDom LadyD	Registration #:	
Breed:	Siberian	Microchip #:	
Sex:	Female	Laboratory #:	18-744
DOB:	Oct-17	Report Date:	6/14/2019

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

#### Explanation of Results

<b>Normal</b>	A 'normal' result means that your cat does not have the mutation that causes the associated genetic disease.
<b>Carrier</b>	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.
<b>At-Risk / Affected</b>	An 'at-risk / affected' result indicates that your cat may have inherited one or two copies of the mutation that has been reported to cause this genetic disease. Depending on the mode of genetic inheritance for this particular disease, inheriting one or two mutant copies of the gene may result in the disease.
<b>No Result</b>	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 fail. 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 assay. 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 assay inhibitors. An acceptable level of assays with no results has been determined by Paw Print Genetics. Cats with at least 75 test results are determined to be acceptable and reportable. If your cat has an unacceptable level of assays with no results, you will be contacted for a new sample to repeat the testing.

Trait (Variants Tested)	Genotype (No. alleles identified)	Interpretation†
<b>ABC Blood Group System</b>	<b>A/A</b>	<b>A blood group*</b>
B group variant 1 (b <sup>1</sup> )	0	
B group variant 2 (b <sup>2</sup> )	0	
C group variant (a <sup>c</sup> )	0	
<b>Agouti Coat Color - A Locus</b>	<b>A/A</b>	<b>Banded hairs</b>
Non-agouti variant (a)	0	
<b>Brown Coat Color - B Locus</b>	<b>B/B</b>	<b>Black coat color</b>
Cinnamon variant (b <sup>1</sup> )	0	
Chocolate variant (b)	0	
<b>Pointed Coat Color and Albinism - C Locus</b>	<b>C/C</b>	<b>Non-pointed coat</b>
Siamese variant (c <sup>s</sup> )	0	
Burmese variant (c <sup>b</sup> )	0	
Albino variant (c)	0	
Albino variant 2 (c <sup>2</sup> )	0	
<b>Dilute Coat Color - D Locus</b>	<b>D/d</b>	<b>Non-dilute (dilute carrier)</b>
Dilute variant (d)	1	
<b>Amber and Russet Coat Color - E Locus</b>	<b>E/E</b>	<b>Non-amber, darkly pigmented coat color</b>
Amber variant (e)	0	
Russet variant (e <sup>r</sup> )	0	
<b>Tabby Coat Color Pattern - Mc Locus</b>	<b>mc/mc</b>	<b>Blotched (classic) tabby coat color pattern</b>
Blotched variant 1 (mc <sup>1</sup> )	2	
Blotched variant 2 (mc <sup>2</sup> )	0	
Blotched variant 3 (mc <sup>3</sup> )	0	
<b>Dominant White, White Spotting and Gloves – W Locus</b>	<b>w/w</b>	<b>No white spotting</b>
Dominant white or white spotting variant (W or w <sup>s</sup> )	0	
Gloves variant (w <sup>g</sup> )	0	
<b>Long Hair - L Locus</b>	<b>lh/lh</b>	<b>Longhaired</b>
Long hair variant 1 (lh <sup>1</sup> )	1	
Long hair variant 2 (lh <sup>2</sup> )	0	
Long hair variant 3 (lh <sup>3</sup> )	0	
Long hair variant 4 (lh <sup>4</sup> )	1	
<b>Curly Coat (Cornish Rex Type)</b>	<b>Cu/Cu</b>	<b>Straight coat</b>
Cornish Rex curly variant (cu)	0	
<b>Coat Type - Curly (Devon Rex, Selkirk Rex Type) or Hairless (Sphynx Type) - R Locus</b>	<b>R/R</b>	<b>Straight coat</b>
Selkirk Rex curly variant (SR)	0	
Devon Rex curly variant (re)	0	
Sphynx Hairless variant (hr)	0	
<b>Short Tail (Japanese Bobtail Type)</b>	<b>st/st</b>	<b>Normal length tail</b>
Japanese bobtail variant (ST)	0	
<b>Polydactyly</b>	<b>pd/pd</b>	<b>Normal (typical) toes</b>
Polydactyly variant 1 (PD <sup>1</sup> )	0	
Polydactyly variant 2 (PD <sup>2</sup> )	0	
Polydactyly Hemingway variant (PD <sup>H</sup> )	0	
<b>Folded Ears with Osteochondrodysplasia</b>	<b>f/f</b>	<b>Typical (non-folded) ears</b>
Scottish fold variant (F)	0	

†Determinants of coat colors and traits are complex. Many of these variants are known and many of the genes screened in this assay 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 assay, may also affect the final coat color or traits seen in your cat.

\*The ABC Blood Group System interpretation is based off of three variants (b<sup>1</sup>, b<sup>2</sup> and a<sup>c</sup>). Other blood group variants have been identified and associated with specific breeds, such as the Ragdoll. Definitive bloodtyping should be done by agglutination or other similar testing methods.

Disease Tests	Genotype	Interpretation
Acute Intermittent Porphyria, Variant 1	WT/WT	Normal
Acute Intermittent Porphyria, Variant 2	WT/WT	Normal
Acute Intermittent Porphyria, Variant 3	WT/WT	Normal
Acute Intermittent Porphyria, Variant 4	WT/WT	Normal
Acute Intermittent Porphyria, Variant 5	WT/WT	Normal
Acute Intermittent Porphyria, Variant 6	WT/WT	Normal
Autoimmune Lymphoproliferative Syndrome	WT/WT	Normal
Brachycephaly (Burmese Type)	WT/WT	Normal
Congenital Adrenal Hyperplasia	WT/WT	Normal
Congenital Erythropoietic Porphyria, Variant 1	WT/WT	Normal
Congenital Erythropoietic Porphyria, Variant 2	WT/WT	Normal
Congenital Hypothyroidism	WT/WT	Normal
Congenital Myasthenic Syndrome	WT/WT	Normal
Cystinuria, Type 1A	WT/WT	Normal
Cystinuria, Type B, Variant 1	WT/WT	Normal
Cystinuria, Type B, Variant 2	WT/WT	Normal
Cystinuria, Type B, Variant 3	WT/WT	Normal
Cystinuria, Type B, Variant 4	WT/WT	Normal
Cystinuria, Type B, Variant 5	WT/WT	Normal
Dihydropyrimidinase Deficiency	WT/WT	Normal
Factor XII Deficiency, Variant 1	WT/WT	Normal
Feline Leukocyte Adhesion Deficiency, Type 1	WT/WT	Normal
Gangliosidosis GM2A	WT/WT	Normal
Glycogen Storage Disease, Type IV	WT/WT	Normal
GM1 Gangliosidosis	WT/WT	Normal
GM2 Gangliosidosis, Type II	WT/WT	Normal
GM2 Gangliosidosis, Type II (Burmese Type)	WT/WT	Normal
GM2 Gangliosidosis, Type II (Japanese Domestic)	WT/WT	Normal
GM2 Gangliosidosis, Type II (Korat Type)	WT/WT	Normal
Hemophilia B, Variant 1	WT/WT	Normal
Hemophilia B, Variant 2	WT/WT	Normal
Hyperlipoproteinemia	No Result	No Result
Hypertrophic Cardiomyopathy (Maine Coon Type)	WT/WT	Normal
Hypertrophic Cardiomyopathy (Ragdoll Type)	WT/WT	Normal
Hypokalemic Periodic Paralysis	WT/WT	Normal
Hypotrichosis with Short Life Expectancy	WT/WT	Normal

Disease Tests	Genotype	Interpretation
Mucopolysaccharidosis Type I	WT/WT	Normal
Mucopolysaccharidosis Type VI (Mild Form)	WT/WT	Normal
Mucopolysaccharidosis Type VI (Siamese Type)	WT/WT	Normal
Mucopolysaccharidosis Type VII, Variant 1	WT/WT	Normal
Mucopolysaccharidosis Type VII, Variant 2	WT/WT	Normal
Multiple Drug Resistance	WT/WT	Normal
Myotonia Congenita	WT/WT	Normal
Niemann-Pick C1 Disease, Variant 1	WT/WT	Normal
Niemann-Pick C1 Disease, Variant 2	WT/WT	Normal
Niemann-Pick C2 Disease	WT/WT	Normal
Polycystic Kidney Disease	WT/WT	Normal
Primary Hyperoxaluria Type II	WT/WT	Normal
Pyruvate Kinase Deficiency	WT/WT	Normal
Retinal Degeneration II	No Result	No Result
Spinal Muscular Atrophy	No Result	No Result
Vitamin D-dependent Rickets, Type IA, Variant 1	WT/WT	Normal
Vitamin D-dependent Rickets, Type IA, Variant 2	WT/WT	Normal