



## Demographic Information

Call Name	Tully
Registered Name	Milldamcreek Your Heart Or Mine
Breed	Miniature American Shepherd
Sex	Female
Owner	Kelly More
DOB	September 24, 2023
Registration Number	DN78590701
Tattoo	
Microchip	952000001398595
Laboratory #	459669
Report Date	September 28, 2024

These tests were developed and performed by Paw Print Genetics<sup>®</sup>, Lincoln, NE.

## Explanation of Results

<b>Normal</b>	A 'Normal' result means that your dog does not have the mutation that causes the associated genetic disease.
<b>Carrier</b>	A 'Carrier' result indicates that your dog has inherited one copy of the mutation that has been reported to cause this genetic disease. Your dog may not be clinically affected by this mutation because two copies of the mutation are usually required to cause disease.
<b>Carrier / At-Risk</b>	A 'Carrier / At-Risk' result indicates that your dog 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. Dogs with one copy of the mutation may have a milder phenotype as compared to dogs with two copies of this mutation.
<b>At-Risk / Affected</b>	An 'At-Risk / Affected' result indicates that your dog 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.
<b>No Result</b>	'No Result' indicates that we were unable to obtain a genotype for your dog for this specific disease or trait and does not mean that your dog 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 dog'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. Dogs with at least 90% of the test results are determined to be acceptable and reportable. If your dog 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:  M:  Y:

## Breed Profile

Disease Name	Geno.	Interpretation
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<a href="#">Coagulation Factor VII Deficiency.</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Collie Eye Anomaly.</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Cone Degeneration</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Cranio-mandibular Osteopathy.</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Degenerative Myelopathy.</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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Degenerative Myelopathy (Bernese Mountain Dog Variant)	0	
Degenerative Myelopathy (Common Variant)	0	

<a href="#">Exercise-Induced Collapse</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Hereditary Ataxia (Australian Shepherd Type).</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Hereditary Cataracts (Australian Shepherd Type).</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Hyperuricosuria</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Intervertebral Disc Disease Risk Factor and Chondrodystrophy (CDDY with IVDD).</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Intestinal Cobalamin Malabsorption (Border Collie Type).</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Junctional Epidermolysis Bullosa (Australian Shepherd Type).</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Multidrug Resistance 1</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Multifocal Retinopathy 1</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type).</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Neuronal Ceroid Lipofuscinosis 6</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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<a href="#">Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd Type).</a>	WT/WT	<input type="text" value="Normal (Clear)"/>
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[Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration \(prcd\)](#)

WT/WT

Normal (Clear)

[Von Willebrand Disease I](#)

WT/WT

Normal (Clear)

WT: **wild type (normal)**

M: **mutant**

Y: **Y chromosome (male)**

## Coat Colors & Traits

**Trait Name**

**Geno.**

**Interpretation**

[A Locus \(Agouti\)](#)

$a^t/a^t$

Tricolor, black and tan

[A<sup>s</sup> Locus \(Saddle Tan\)](#)

N/N

No saddle tan/creeping tan

[B Locus \(Brown\)](#)

B/B

Black coat, nose and foot pads (does not carry brown)

B Locus (Brown) -  $b^a$   
B Locus (Brown) -  $b^c$   
B Locus (Brown) -  $b^d$   
B Locus (Brown) -  $b^h$   
B Locus (Brown) -  $b^e$   
B Locus (Brown) -  $b^s$

0  
0  
0  
0  
0  
0

[Brachycephaly](#)

BR/BR

Likely medium to long muzzle

[Chondrodysplasia \(CDPA\)](#)

cd/cd

Likely typical leg length

[Co Locus \(Cocoa, French Bulldog Type\)](#)

CO/CO

Black coat, nose and foot pads (does not carry cocoa)

[Cu Locus \(Curly Hair\)](#)

Cu/Cu

Straight coat

[D Locus \(Dilute\)](#)

D/D

Non-dilute (does not carry dilute)

D Locus (Dilute) -  $d^1$   
D Locus (Dilute) -  $d^2$   
D Locus (Dilute) -  $d^3$

0  
0  
0

[E Locus](#)

$E^m/E$

Melanistic Mask - Carrier (Black)

E Locus -  $E^m$  (Melanistic Mask)  
E Locus -  $E^g$  (Grizzle, Afghan Hound Type)  
E Locus -  $E^h$  (Sable, Cocker Spaniel Type)  
E Locus -  $e^A$  (Ancient Red, Spitz and Scent Hound Type)  
E Locus -  $e^1$  (Yellow/Red)  
E Locus -  $e^2$  (Cream, Australian Cattle Dog Type)  
E Locus -  $e^3$  (White, Alaskan and Siberian Husky Type)

1  
0  
0  
0  
0  
0  
0

<a href="#">H Locus (Harlequin, Great Dane Type).</a>	h/h	No harlequin
<a href="#">Hairlessness</a>	Rh/Rh	Coated
Hairlessness (American Hairless Terrier Type) - rh <sup>1</sup> Hairlessness (Scottish Deerhound Type) - rh <sup>2</sup>	0 0	
<a href="#">Hr Locus (FOXI3 Hairless Gene Test, Mexican Hairless, Peruvian Hairless and Chinese Crested Type).</a>	hr/hr	Coated
<a href="#">I Locus (Intensity).</a>	I/I	Normal intensity
<a href="#">IC Locus (Improper Coat/Furnishings).</a>	IC/IC	No furnishings, improper coat
<a href="#">K Locus (Dominant Black).</a>	k <sup>y</sup> /k <sup>y</sup>	Agouti expression allowed
<a href="#">L Locus (Long Hair/Fluffy).</a>	Lh <sup>1</sup> /Lh <sup>1</sup>	Longhaired (carries two copies of long hair)
L Locus (Long Hair/Fluffy) - Lh <sup>1</sup> L Locus (Long Hair/Fluffy) - Lh <sup>2</sup> L Locus (Long Hair/Fluffy) - Lh <sup>3</sup> L Locus (Long Hair/Fluffy) - Lh <sup>4</sup>	2 0 0 0	
<a href="#">M Locus (Merle).</a>	m/m	Non merle
<a href="#">Polydactyly (Common Variant).</a>	pd/pd	Normal (typical) toes (likely no hind dewclaws)
<a href="#">Polydactyly (Great Pyrenees Type).</a>	WT/WT	Normal (Clear)
<a href="#">R Locus (Roan/Ticked).</a>	r/r	No roan or ticking
R Locus (Roan/Ticked) - R <sup>Ti</sup> R Locus (Roan/Ticked) - R	0 0	
<a href="#">S Locus (White Spotting, Parti, or Piebald).</a>	S/S	No white spotting, flash, parti, or piebald
<a href="#">SD Locus (Shedding).</a>	SD/SD	High shedding
<a href="#">Sex Determination</a>	X/X	Female
<a href="#">Social Behavior</a>	WT/M; WT/WT	May demonstrate more social behavior
Social Behavior, Variant 1 Social Behavior, Variant 2	1 0	
<a href="#">T Locus (Natural Bobtail).</a>	t/t	Normal tail

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 Canine HealthCheck interact. In addition, not all the genetic factors that contribute to a dog's coat color and traits are known. Because of the

complexities in gene-gene interactions, the coat colors and traits reported in your Canine HealthCheck results may vary from your dog's actual appearance. Individual differences in genes throughout the canine genome, not tested in this genetic screen, may also affect the final coat color or traits seen in your dog.

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

Canine HealthCheck® 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 are DNA-based, rare genomic variations may interfere with the performance of some individual tests producing false results. If you think any results are in error, please contact the laboratory for further evaluation.