

Demographic Information

Call Name

May

DOB

March 6, 2020

Registered Name

Toy Australian Shepherd

Tattoo

Breed

F

Microchip

Owner

Jennifer Hoyt

Laboratory #

Registration Number

AN-22-004324

Report Date

May 13, 2022

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

Explanation of Results

Normal

A 'Normal' result means that your dog does not have the mutation that causes the associated

genetic disease.

Carrier

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.

Carrier / At-Risk

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.

At-Risk / Affected

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.

No Result

'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

Please review our testing terms and disclaimers regarding your results.

WT: wild type (normal)

M: mutant

Y: Y chromosome (male)

Breed Profile

Disease Name	Geno.	Interpretation
Coagulation Factor VII Deficiency	WT/WT	Normal (Clear)
Collie Eye Anomaly	WT/WT	Normal (Clear)
Cone Degeneration	WT/WT	Normal (Clear)
<u>Craniomandibular Osteopathy</u>	WT/WT	Normal (Clear)
<u>Degenerative Myelopathy</u>	WT/WT	Normal (Clear)
Degenerative Myelopathy (Bernese Mountain Dog Variant) Degenerative Myelopathy (Common Variant)	0	
Exercise-Induced Collapse	WT/WT	Normal (Clear)
Hereditary Cataracts Australian Shepherd Type	WT/WT	Normal (Clear)
<u>Hyperuricosuria</u>	WT/WT	Normal (Clear)
Intervertebral Disc Disease Risk Factor and Chondrodystrophy. CDDY with IVDD	WT/WT	Normal (Clear)
Multidrug Resistance 1	WT/M	Carrier (At-Risk)
Multifocal Retinopathy 1	WT/WT	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 6	WT/WT	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 8 Australian Shepherd Type	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration prcd	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

<mark>A^s Locus</mark> Saddle Tan	N/A ^s	Saddle tan/creeping tan (non saddle tan carrier)
B Locus Brown	B/b	Black coat, nose and foot pads (carries brown)
Surger Surger Statement	0	
B Locus (Brown) - b ^a	0	
B Locus (Brown) - b ^c	0	
B Locus (Brown) - b ^d B Locus (Brown) - b ^s	1	
<u>Brachycephaly</u>	BR/BR	Likely medium to long muzzle
<u>Chondrodysplasia</u> CDPA	cd/cd	Likely typical leg length
<u>Cu Locus</u> Curly Hair	Cu/Cu	Straight coat
D Locus Dilute	D/D	Non dilute
D Locus (Dilute) - d ¹	0	
D Locus (Dilute) - d ²	0	
<u>E Locus</u> Yellow/Red	E/E	Black
E ^g <u>Locus</u> Grizzle, Afghan Hound T <u>ype</u>	N/N	No grizzle
E ^h Locus Sable, Cocker Spaniel Type	N/N	No sable
E ^m Locus Melanistic Mask	N/N	No melanistic mask
<u>H Locus</u> Harlequin, Great Dane T <u>ype</u>	h/h	No harlequin
Hr Locus FOXI3 Hairless Gene Test, Mexican Hairless, Peruvian Hairless and Chinese Crested Type	hr/hr	Coated
<u>l Locus</u> <u>Intensity</u>	No Result	No Result
IC Locus Improper Coat/Furnishings	IC/IC	No furnishings, improper coat
K Locus Dominant Black	k ^y /k ^y	Agouti expression allowed
<u>L Locus</u> <u>Long Hair/Fluffy</u> <u>- Lh¹, Lh²</u>	Lh/Lh	Longhaired
L Locus (Long Hair/Fluffy) - Lh ¹	2	

M Locus Merle	m/M267	Single copy merle carrier
<u>Polydactyly</u>	pd/pd	Normal (typical) toes (likely no hind dewclaws)
S Locus White Spotting, Parti, or Piebald	S/S	No white spotting, flash, parti, or piebald
SD Locus Shedding	SD/SD	High shedding
Sex Determination	X/X	Female
T Locus Natural Bobtail	t/t	Normal tail

 $WT{:} \boxed{\text{wild type (normal)}} \qquad M{:} \boxed{\text{mutant}} \qquad Y{:} \boxed{\text{Y chromosome (male)}}$

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.

Diseases

Disease Name	Geno.	Interpretation
Acral Mutilation Syndrome	WT/WT	Normal (Clear)
Acute Respiratory Distress Syndrome	WT/WT	Normal (Clear)
Adult Paroxysmal Dyskinesia	WT/WT	Normal (Clear)
Alaskan Husky Encephalopathy	WT/WT	Normal (Clear)
Alaskan Malamute Polyneuropathy	WT/WT	Normal (Clear)
Amelogenesis Imperfecta	WT/WT	Normal (Clear)
Benign Familial Juvenile Epilepsy	No Result	No Result
Canine Multiple System Degeneration Chinese Crested Type	WT/WT	Normal (Clear)
<u>Canine Multiple System Degeneration</u> <u>Kerry Blue Terrier Type</u>	WT/WT	Normal (Clear)
Canine Scott Syndrome	WT/WT	Normal (Clear)
<u>Catalase Deficiency</u>	WT/WT	Normal (Clear)
Centronuclear Myopathy	No Result	No Result
Cerebellar Ataxia	WT/WT	Normal (Clear)

Finnish Hound Type Country Continued Degraphyration	No Result	No Result
Cerebellar Cortical Degeneration	WT/WT	Normal (Clear)
Cerebellar Degeneration	WT/WT	Normal (Clear)
<u>Chondrodysplasia</u> <u>Karelian Bear Dog and Norwegian Elkhound Type</u>	W 17 W 1	Worman (Clear)
Cleft Palate and Syndactyly Nova Scotia Duck Tolling Retriever Type	WT/WT	Normal (Clear)
Coagulation Factor VII Deficiency	WT/WT	Normal (Clear)
Collie Eye Anomaly	WT/WT	Normal (Clear)
Complement 3 Deficiency	WT/WT	Normal (Clear)
Cone Degeneration	WT/WT	Normal (Clear)
Cone Degeneration German Shepherd Dog Type	WT/WT	Normal (Clear)
Cone Degeneration German Shorthaired Pointer Type	WT/WT	Normal (Clear)
Cone Degeneration Labrador Retriever Type	WT/WT	Normal (Clear)
<u>Congenital Hypothyroidism with Goiter</u> <u>Terrier Type</u>	WT/WT	Normal (Clear)
Congenital Methemoglobinemia	WT/WT	Normal (Clear)
Congenital Myasthenic Syndrome Jack Russell Terrier Type	WT/WT	Normal (Clear)
Congenital Myasthenic Syndrome Labrador Retriever Type	WT/WT	Normal (Clear)
Congenital Myasthenic Syndrome Old Danish Pointer Type	WT/WT	Normal (Clear)
Congenital Stationary Night Blindness	WT/WT	Normal (Clear)
<u>Craniomandibular Osteopathy</u>	WT/WT	Normal (Clear)
Cyclic Neutropenia	WT/WT	Normal (Clear)
<u>Cystinuria</u> <u>Australian Cattle Dog Type</u>	WT/WT	Normal (Clear)
<u>Cystinuria</u> <u>Labrador Retriever Type</u>	WT/WT	Normal (Clear)
<u>Cystinuria</u> <u>Miniature Pinscher Type</u>	WT/WT	Normal (Clear)
<u>Cystinuria</u> <u>Newfoundland Type</u>	No Result	No Result

Ectodermal Dysplasia, X-Linked Shepherd Type Ehlers-Danlos Syndrome WT/WT Normal (Clear) Ehlers-Danlos Syndrome (Variant 1) Ehlers-Danlos Syndrome (Variant 2)	Cystinuria Type 3 Bulldog Type Risk Factor, Variant 3	WT/WT	Normal (Clear)
Cystinuria Type 3 (Bulldog Type Risk Factor, Variant 2) Dandy-Walker-Like Malformation WT/WT Normal (Clear) Degenerative Myelopathy (Bernese Mountain Dog Variant) Degenerative Myelopathy (Eommon Variant) Degenerative Myelopathy (Eommon Variant) Degenerative Myelopathy (Eommon Variant) Degenerative Myelopathy (Eommon Variant) Degenerative Myelopathy (Eommon Variant) Degenerative Myelopathy (Eommon Variant) Degenerative Myelopathy (Eommon Variant) Degenerative Myelopathy (Eommon Variant) Degenerative Myelopathy (Eommon Variant) Degenerative Myelopathy (Eolar) Dilitated Cardiomyopathy Dilitated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 1 Dilitated Cardiomyopathy Schnauzer Type Dry Eye Curly Coat Syndrome Dry Eye Curly Coat Syndrome Dry Eye Curly Coat Syndrome Dystrophic Epidermolysis Bullosa WT/WT Normal (Clear) Dormal Dysplasia Chesapeake Bay Retriever Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasi		WT/WT	Normal (Clear)
Degenerative Myelopathy Degenerative Myelopathy (Bernese Mountain Dog Variant) Degenerative Myelopathy (Common Variant) Degenerative Myelopathy (Common Variant) Degenerative Myelopathy (Common Variant) Degenerative Myelopathy (Common Variant) Degenerative Myelopathy (Common Variant) Degenerative Myelopathy (Common Variant) Degenerative Myelopathy (Common Variant) Degenerative Myelopathy (Common Variant) Degenerative Myelopathy (Common Variant) Degenerative Myelopathy (Common Variant) Degenerative Myelopathy (Common Variant) Degenerative Myelopathy (Colear) Degenera			
Degenerative Myelopathy (Bernese Mountain Dog Variant) Degenerative Myelopathy (Common Variant) Degenerative Myelopathy Early-Onset Risk Modifier Pembroke Welsh Corgi Type Dental Hypomineralization WT/WT Normal (Clear) Diffuse Cystic Renal Dysplasia and Hepatic Fibrosis WT/WT Normal (Clear) Dillated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 1 Dillated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 2 Dillated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 2 Dillated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 2 Dillated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 2 Dillated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 2 Dillated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 2 Dillated Cardiomyopathy Doberman Pinscher Type Normal (Clear) Dillated Cardiomyopathy Doberman Pinscher Type Dry Eye Curly Coat Syndrome No Result No Result No Result Normal (Clear) Dystrophic Epidermolysis Bullosa WT/WT Normal (Clear) Early Retinal Degeneration WT/WT Normal (Clear) Ectodermal Dysplasia Chesapeake Bay Retriever Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Shepherd Type Ectodermal Dysplasia, X-Linked Shepherd Type Ehlers-Danlos Syndrome WT/WT Normal (Clear) Ehlers-Danlos Syndrome (Variant 1) Ehlers-Danlos Syndrome (Variant 2) Dilliptocytosis WT/WT Normal (Clear) Normal (Clear) Dilliptocytosis WT/WT Normal (Clear) Dilliptocytosis WT/WT Normal (Clear)	Dandy-Walker-Like Malformation	WT/WT	Normal (Clear)
Degenerative Myelopathy (Common Variant) Degenerative Myelopathy Early-Onset Risk Modifier Pembroke Welsh Corgi Type Dental Hypomineralization Diffuse Cystic Renal Dysplasia and Hepatic Fibrosis WT/WT Normal (Clear) Dilated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 1 Dilated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 2 Dilated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 2 Dilated Cardiomyopathy Schnauzer Type Dry Eye Curly Coat Syndrome No Result No Result Normal (Clear) Dystrophic Epidermolysis Bullosa WT/WT Normal (Clear) Early Retinal Degeneration WT/WT Normal (Clear) Ectodermal Dysplasia Chesapeake Bay Retriever Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Shenberd Type Ectodermal Dy	<u>Degenerative Myelopathy</u>	WT/WT	Normal (Clear)
Pembroke Welsh Corgi Type Dental Hypomineralization Diffuse Cystic Renal Dysplasia and Hepatic Fibrosis WT/WT Normal (Clear) Dilated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 1 Dilated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 2 Dilated Cardiomyopathy WT/WT Normal (Clear) Normal (Clear) Normal (Clear) Dilated Cardiomyopathy WT/WT Normal (Clear) Dilated Cardiomyopathy WT/WT Normal (Clear) No Result No Result No Result Normal (Clear) Dystrophic Epidermolysis Bullosa WT/WT Normal (Clear) Early Retinal Degeneration WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) Ectodermal Dysplasia Chesapeake Bay Retriever Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Shepherd Type Ehlers-Danlos Syndrome WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) Normal (Clear) WT/WT Normal (Clear)			
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Dilated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 1 Dilated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 2 Dilated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 2 Dilated Cardiomyopathy Schnauzer Type No Result No Result No Result No Result Normal (Clear) Dry Eye Curly Coat Syndrome No Result Normal (Clear) WT/WT Normal (Clear) Early Retinal Degeneration WT/WT Normal (Clear) Ectodermal Dysplasia Chesapeake Bay Retriever Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Shepherd Type Ectodermal Dysplasia, X-Linked Shepherd Type Ectodermal Dysplasia, X-Linked Shepherd Type Ehlers-Danlos Syndrome WT/WT Normal (Clear) Ehlers-Danlos Syndrome (Variant 1) Ehlers-Danlos Syndrome (Variant 2) Elliptocytosis WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear)	Dental Hypomineralization	WT/WT	Normal (Clear)
Doberman Pinscher Type Risk Factor, Variant 1 Dilated Cardiomyopathy Doberman Pinscher Type Risk Factor, Variant 2 Dilated Cardiomyopathy Schnauzer Type Dry Eye Curly Coat Syndrome No Result Dystrophic Epidermolysis Bullosa Early Retinal Degeneration WT/WT Normal (Clear) Ectodermal Dysplasia Chesapeake Bay Retriever Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Shepherd Type Ehlers-Danlos Syndrome WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) Ehlers-Danlos Syndrome (Variant 1) Ehlers-Danlos Syndrome (Variant 2) Elliptocytosis WT/WT Normal (Clear) WT/WT Normal (Clear)	<u>Diffuse Cystic Renal Dysplasia and Hepatic Fibrosis</u>	WT/WT	Normal (Clear)
Doberman Pinscher Type Risk Factor, Variant 2 Dilated Cardiomyopathy. Schnauzer Type Dry Eye Curly Coat Syndrome No Result Normal (Clear) Normal (Clear) Normal (Clear) Normal (Clear) Normal (Clear) Normal (Clear) WT/WT X-Linked Female Normal Chespherd Type Cotodermal Dysplasia, X-Linked Dachshund Type Cotodermal Dysplasia, X-Linked Dachshund Type Cotodermal Dysplasia, X-Linked Shepherd Type Chlers-Danlos Syndrome WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear)		WT/WT	Normal (Clear)
Schnauzer Type Dry Eye Curly Coat Syndrome No Result Normal (Clear) Early Retinal Degeneration WT/WT Normal (Clear) Ectodermal Dysplasia Chesapeake Bay Retriever Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Shepherd Type Ectodermal Dysplasia, X-Linked Shepherd Type Ehlers-Danlos Syndrome WT/WT WT/WT Normal (Clear) Normal (Clear) WT/WT Normal (Clear) Normal (Clear) WT/WT Normal (Clear)	<u>Dilated Cardiomyopathy</u> <u>Doberman Pinscher Type Risk Factor, Variant 2</u>	WT/WT	Normal (Clear)
Dystrophic Epidermolysis Bullosa WT/WT Normal (Clear) Early Retinal Degeneration WT/WT Normal (Clear) Ectodermal Dysplasia Chesapeake Bay Retriever Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked WT/WT X-Linked Female Normal Shepherd Type Ehlers-Danlos Syndrome WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear)	<u>Dilated Cardiomyopathy</u> <u>Schnauzer Type</u>	WT/WT	Normal (Clear)
Ectodermal Dysplasia Chesapeake Bay Retriever Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Shepherd Type Ehlers-Danlos Syndrome Ehlers-Danlos Syndrome (Variant 1) Ehlers-Danlos Syndrome (Variant 2) Elliptocytosis WT/WT Normal (Clear) WT/WT Normal (Clear)	<u>Dry Eye Curly Coat Syndrome</u>	No Result	No Result
Ectodermal Dysplasia Chesapeake Bay Retriever Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Shepherd Type Ehlers-Danlos Syndrome WT/WT WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear) WT/WT Normal (Clear)	<u>Dystrophic Epidermolysis Bullosa</u>	WT/WT	Normal (Clear)
Chesapeake Bay Retriever Type Ectodermal Dysplasia, X-Linked Dachshund Type Ectodermal Dysplasia, X-Linked Shepherd Type Chlers-Danlos Syndrome Ehlers-Danlos Syndrome (Variant 1) Ehlers-Danlos Syndrome (Variant 2) Elliptocytosis WT/WT Normal (Clear) WT/WT Normal (Clear)	Early Retinal Degeneration	WT/WT	Normal (Clear)
Dachshund Type Ectodermal Dysplasia, X-Linked Shepherd Type Ehlers-Danlos Syndrome WT/WT Normal (Clear) Ehlers-Danlos Syndrome (Variant 1) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		WT/WT	Normal (Clear)
Shepherd Type Ehlers-Danlos Syndrome WT/WT Normal (Clear) Ehlers-Danlos Syndrome (Variant 1) Ehlers-Danlos Syndrome (Variant 2) O Elliptocytosis WT/WT Normal (Clear) Epidermolytic Hyperkeratosis WT/WT Normal (Clear)	<u>Ectodermal Dysplasia, X-Linked</u> <u>Dachshund Type</u>	WT/WT	X-Linked Female Norma
Ehlers-Danlos Syndrome (Variant 1) Ehlers-Danlos Syndrome (Variant 2) O WT/WT Normal (Clear) Epidermolytic Hyperkeratosis WT/WT Normal (Clear)		WT/WT	X-Linked Female Norma
Elliptocytosis WT/WT Normal (Clear) Epidermolytic Hyperkeratosis WT/WT Normal (Clear)	<u> Ehlers-Danlos Syndrome</u>	WT/WT	Normal (Clear)
Epidermolytic Hyperkeratosis WT/WT Normal (Clear)	Ehlers-Danlos Syndrome (Variant 1) Ehlers-Danlos Syndrome (Variant 2)		
inisodis Falling Sundanana	Elliptocytosis	WT/WT	Normal (Clear)
pisodic Falling Syndrome WT/WT Normal (Clear)	<u>pidermolytic Hyperkeratosis</u>	WT/WT	Normal (Clear)
	pisodic Falling Syndrome	WT/WT	Normal (Clear)

Exercise-Induced Collapse	WT/WT	Normal (Clear)
Factor XI Deficiency	WT/WT	Normal (Clear)
Familial Nephropathy Cocker Spaniel Type	WT/WT	Normal (Clear)
Familial Nephropathy English Springer Spaniel Type	WT/WT	Normal (Clear)
<u>Fucosidosis</u>	WT/WT	Normal (Clear)
Gallbladder Mucoceles	WT/WT	Normal (Clear)
Glanzmann's Thrombasthenia Great Pyrenees Type	WT/WT	Normal (Clear)
Glanzmann's Thrombasthenia Otterhound Type	WT/WT	Normal (Clear)
Glaucoma Border Collie Type	WT/WT	Normal (Clear)
Globoid Cell Leukodystrophy Irish Setter Type	WT/WT	Normal (Clear)
Globoid Cell Leukodystrophy Terrier Type	WT/WT	Normal (Clear)
Glycogen Storage Disease Ia	WT/WT	Normal (Clear)
Glycogen Storage Disease IIIa	WT/WT	Normal (Clear)
Glycogen Storage Disease VII Wachtelhund Type	WT/WT	Normal (Clear)
Glycogen Storage Disease VII, PFK Deficiency	WT/WT	Normal (Clear)
GM1 Gangliosidosis Alaskan Husky Type	WT/WT	Normal (Clear)
GM1 Gangliosidosis Portuguese Water Dog Type	WT/WT	Normal (Clear)
GM1 Gangliosidosis Shiba Inu Type	WT/WT	Normal (Clear)
GM2 Gangliosidosis Japanese Chin Type	WT/WT	Normal (Clear)
GM2 Gangliosidosis Poodle Type	WT/WT	Normal (Clear)
<u>Greyhound Polyneuropathy</u>	WT/WT	Normal (Clear)
Hemophilia A Boxer Type	WT/WT	X-Linked Female Normal
<u>Hemophilia A</u> <u>German Shepherd Dog, Type 1</u>	WT/WT	X-Linked Female Normal
Hemophilia A	WT/WT	X-Linked Female Normal

German Shepherd Dog, Type 2

<u>Hemophilia B</u> <u>Cairn Terrier Type</u>	WT/WT	X-Linked Female Normal
Hemophilia B Lhasa Apso Type	WT/WT	X-Linked Female Normal
Hemophilia B Rhodesian Ridgeback Type	WT/WT	X-Linked Female Normal
Hereditary Cataracts	WT/WT	Normal (Clear)
Hereditary Cataracts Australian Shepherd Type	WT/WT	Normal (Clear)
Hereditary Footpad Hyperkeratosis Irish Terrier and Kromfohrländer Type	WT/WT	Normal (Clear)
Hereditary Nasal Parakeratosis	WT/WT	Normal (Clear)
Hereditary Nasal Parakeratosis Greyhound Type	WT/WT	Normal (Clear)
Hereditary Nephritis Samoyed Type	WT/WT	X-Linked Female Normal
<u>Hyperuricosuria</u>	WT/WT	Normal (Clear)
Hypomyelination Weimaraner Type	WT/WT	Normal (Clear)
<u>Ichthyosis</u> <u>American Bulldog Type</u>	WT/WT	Normal (Clear)
<u>Ichthyosis</u> <u>Golden Retriever Type 1</u>	WT/WT	Normal (Clear)
<u>Ichthyosis</u> <u>Great Dane Type</u>	WT/WT	Normal (Clear)
Inherited Myopathy of Great Danes	WT/WT	Normal (Clear)
Intervertebral Disc Disease Risk Factor and Chondrodystrophy CDDY with IVDD	WT/WT	Normal (Clear)
Intestinal Cobalamin Malabsorption Beagle Type	WT/WT	Normal (Clear)
Intestinal Cobalamin Malabsorption Border Collie Type	WT/WT	Normal (Clear)
Juvenile Laryngeal Paralysis and Polyneuropathy	WT/WT	Normal (Clear)
Juvenile Myoclonic Epilepsy Rhodesian Ridgeback Type	WT/WT	Normal (Clear)
L-2-Hydroxyglutaric Aciduria Staffordshire Bull Terrier Type	WT/WT	Normal (Clear)
<u>Lagotto Storage Disorder</u>	WT/WT	Normal (Clear)

Late Onset Ataxia	WT/WT	Normal (Clear)
<u>Lethal Acrodermatitis</u>	WT/WT	Normal (Clear)
Leukocyte Adhesion Deficiency, Type I	WT/WT	Normal (Clear)
Leukocyte Adhesion Deficiency, Type III	WT/WT	Normal (Clear)
<u>Ligneous Membranitis</u>	WT/WT	Normal (Clear)
<u>Lundehund Syndrome</u>	WT/WT	Normal (Clear)
Macular Corneal Dystrophy Labrador Retriever Type	WT/WT	Normal (Clear)
May-Hegglin Anomaly	WT/WT	Normal (Clear)
Mucopolysaccharidosis I	WT/WT	Normal (Clear)
Mucopolysaccharidosis IIIA Dachshund Type	WT/WT	Normal (Clear)
Mucopolysaccharidosis IIIA New Zealand Huntaway Type	WT/WT	Normal (Clear)
<u>Mucopolysaccharidosis VII</u> <u>Shepherd Type</u>	WT/WT	Normal (Clear)
Multidrug Resistance 1	WT/M	Carrier (At-Risk)
Multifocal Retinopathy 1	WT/WT	Normal (Clear)
<u>Multifocal Retinopathy 2</u>	WT/WT	Normal (Clear)
Multifocal Retinopathy 3	WT/WT	Normal (Clear)
Muscular Dystrophy Golden Retriever Type	WT/WT	X-Linked Female Normal
<u>Musladin-Lueke Syndrome</u>	No Result	No Result
Myostatin Deficiency Whippet and Longhaired Whippet Type	WT/WT	Normal (Clear)
Myotonia Congenita Australian Cattle Dog Type	WT/WT	Normal (Clear)
Myotonia Congenita Schnauzer Type	WT/WT	Normal (Clear)
Myotubular Myopathy 1	WT/WT	X-Linked Female Normal
Myotubular Myopathy 1 Rottweiler Type	WT/WT	X-Linked Female Normal
Narcolepsy Dachshund Type	WT/WT	Normal (Clear)
<u>Narcolepsy</u> <u>Doberman Pinscher Type</u>	WT/WT	Normal (Clear)

<u>Narcolepsy</u> <u>Labrador Retriever Type</u>	WT/WT	Normal (Cl
Neonatal Cerebellar Cortical Degeneration	WT/WT	Normal (Cle
Neonatal Encephalopathy with Seizures	WT/WT	Normal (Cle
Neuroaxonal Dystrophy Rottweiler Type	WT/WT	Normal (Cle
Neuroaxonal Dystrophy Spanish Water Dog Type	WT/WT	Normal (Cle
Neuronal Ceroid Lipofuscinosis Tibetan Terrier Type	WT/WT	Normal (Cle
Neuronal Ceroid Lipofuscinosis 1	No Result	No Result
Neuronal Ceroid Lipofuscinosis 1 Cane Corso Type	WT/WT	Normal (Cla
Neuronal Ceroid Lipofuscinosis 10	WT/WT	Normal (Cle
Neuronal Ceroid Lipofuscinosis 12	WT/WT	Normal (Cle
Neuronal Ceroid Lipofuscinosis 2	WT/WT	Normal (Cle
Neuronal Ceroid Lipofuscinosis 4A	WT/WT	Normal (Cle
Neuronal Ceroid Lipofuscinosis 5 Australian Cattle Dog/Border Collie Type	WT/WT	Normal (Cle
Neuronal Ceroid Lipofuscinosis 5 Golden Retriever Type	WT/WT	Normal (Cle
Neuronal Ceroid Lipofuscinosis 6	WT/WT	Normal (Cle
Neuronal Ceroid Lipofuscinosis 7	WT/WT	Normal (Cle
Neuronal Ceroid Lipofuscinosis 8 Australian Shepherd Type	WT/WT	Normal (Cle
Neuronal Ceroid Lipofuscinosis 8 Setter Type	WT/WT	Normal (Cle
Oculocutaneous Albinism	WT/WT	Normal (Cle
Oculocutaneous Albinism Small Breed Type	WT/WT	Normal (Cle
<u>Osteochondrody splasia</u>	WT/WT	Normal (Cle
<u>Osteogenesis Imperfecta</u> <u>Beagle Type</u>	WT/WT	Normal (Cle
<u>Osteogenesis Imperfecta</u> <u>Dachshund Type</u>	No Result	No Result

P2RY12 Receptor Platelet Disorder	WT/WT	Normal (Clear)
Pembroke Welsh Corgi Duchenne Muscular Dystrophy	WT/WT	X-Linked Female Normal
Persistent Müllerian Duct Syndrome	WT/WT	Normal (Clear)
Polyneuropathy Leonberger and Saint Bernard Type	WT/WT	Normal (Clear)
Polyneuropathy Leonberger Type 2	WT/WT	Normal (Clear)
Polyneuropathy with Ocular Abnormalities and Neuronal Vacuolation	WT/WT	Normal (Clear)
Pompe Disease	WT/WT	Normal (Clear)
<u>Prekallikrein Deficiency</u>	WT/WT	Normal (Clear)
Primary Ciliary Dyskinesia	WT/WT	Normal (Clear)
<u>Primary Hyperoxaluria</u>	WT/WT	Normal (Clear)
Primary Lens Luxation	WT/WT	Normal (Clear)
Primary Open Angle Glaucoma	WT/WT	Normal (Clear)
<u>Primary Open Angle Glaucoma</u> <u>Basset Fauve de Bretagne Type</u>	WT/WT	Normal (Clear)
Primary Open Angle Glaucoma Basset Hound Type	WT/WT	Normal (Clear)
<u>Primary Open Angle Glaucoma</u> <u>Norwegian Elkhound Type</u>	WT/WT	Normal (Clear)
Primary Open Angle Glaucoma and Primary Lens Luxation Shar Pei Type	WT/WT	Normal (Clear)
<u>Progressive Retinal Atrophy</u> <u>Basenji Type</u>	WT/WT	Normal (Clear)
Progressive Retinal Atrophy Bullmastiff/Mastiff Type	WT/WT	Normal (Clear)
Progressive Retinal Atrophy Giant Schnauzer Type	WT/WT	Normal (Clear)
Progressive Retinal Atrophy Irish Setter Type	WT/WT	Normal (Clear)
Progressive Retinal Atrophy Shetland Sheepdog Type	WT/WT	Normal (Clear)
Progressive Retinal Atrophy Sloughi Type	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Cone-Rod Dystrophy	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Cone-Rod Dystrophy 1	WT/WT	Normal (Clear)

Progressive Retinal Atrophy, Cone-Rod Dystrophy 2	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Cone-Rod Dystrophy 4 crd4/cord1	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Generalized	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Golden Retriever 1	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Golden Retriever 2	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, PRA1 Papillon Type	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, PRA3 Tibetan Terrier and Spaniel Type	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration prcd	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Rod-Cone Dysplasia 3	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, Rod-Cone Dysplasia 4	WT/WT	Normal (Clear)
Progressive Retinal Atrophy, X-Linked 1	WT/WT	X-Linked Female Nor
<u>Protein Losing Nephropathy</u>	WT/WT, WT/WT	Normal (Clear) - No Increased Risk
Protein Losing Nephropathy (Variant 1) Protein Losing Nephropathy (Variant 2)	0	
Pyruvate Dehydrogenase Deficiency	No Result	No Result
<u>Pyruvate Kinase Deficiency</u> <u>Basenji Type</u>	No Result	No Result
	No Result WT/WT	No Result Normal (Clear)
Basenji Type Pyruvate Kinase Deficiency		
Pyruvate Kinase Deficiency Beagle Type Pyruvate Kinase Deficiency	WT/WT	Normal (Clear)
Pyruvate Kinase Deficiency Beagle Type Pyruvate Kinase Deficiency Labrador Retriever Type Pyruvate Kinase Deficiency	WT/WT	Normal (Clear) Normal (Clear)
Pyruvate Kinase Deficiency Beagle Type Pyruvate Kinase Deficiency Labrador Retriever Type Pyruvate Kinase Deficiency Pyruvate Kinase Deficiency Pug Type Pyruvate Kinase Deficiency	WT/WT WT/WT	Normal (Clear) Normal (Clear) Normal (Clear)
Pyruvate Kinase Deficiency Beagle Type Pyruvate Kinase Deficiency Labrador Retriever Type Pyruvate Kinase Deficiency Pyruvate Kinase Deficiency Pug Type Pyruvate Kinase Deficiency Terrier Type	WT/WT WT/WT WT/WT	Normal (Clear) Normal (Clear) Normal (Clear)
Pyruvate Kinase Deficiency Beagle Type Pyruvate Kinase Deficiency Labrador Retriever Type Pyruvate Kinase Deficiency Pyruvate Kinase Deficiency Pug Type Pyruvate Kinase Deficiency Pug Type Pyruvate Kinase Deficiency Terrier Type Recurrent Inflammatory Pulmonary Disease Renal Cystadenocarcinoma and Nodular	WT/WT WT/WT WT/WT WT/WT	Normal (Clear) Normal (Clear) Normal (Clear) Normal (Clear)

Sensory Neuropathy Border Collie Type	WT/WT	Normal (Clear)
<u>Severe Combined Immunodeficiency Disease</u> <u>Terrier Type</u>	WT/WT	Normal (Clear)
<u>Severe Combined Immunodeficiency Disease</u> <u>Wetterhoun Type</u>	WT/WT	Normal (Clear)
Severe Combined Immunodeficiency Disease, X- Linked Basset Hound Type	WT/WT	X-Linked Female Normal
Severe Combined Immunodeficiency Disease, X- Linked Corgi Type	WT/WT	X-Linked Female Normal
Shar-Pei Autoinflammatory Disease	WT/WT	Normal (Clear)
Skeletal Dysplasia 2	WT/WT	Normal (Clear)
<u>Spinal Dysraphism</u>	WT/WT	Normal (Clear)
<u>Spinocerebellar Ataxia</u>	WT/WT	Normal (Clear)
<u>Spondylocostal Dysostosis</u>	WT/WT	Normal (Clear)
Stargardt Disease	WT/WT	Normal (Clear)
Startle Disease	WT/WT	Normal (Clear)
<u>Thrombopathia</u> <u>American Eskimo Dog Type</u>	WT/WT	Normal (Clear)
Thrombopathia Basset Hound Type	WT/WT	Normal (Clear)
<u>Thrombopathia</u> <u>Newfoundland Type</u>	WT/WT	Normal (Clear)
<u>Trapped Neutrophil Syndrome</u>	WT/WT	Normal (Clear)
<u>Urolithiasis</u> <u>Native American Indian Dog Type</u>	WT/WT	Normal (Clear)
Van Den Ende-Gupta Syndrome	WT/WT	Normal (Clear)
Von Willebrand Disease I	WT/WT	Normal (Clear)
Von Willebrand Disease II	WT/WT	Normal (Clear)
Von Willebrand Disease III Kooikerhondje Type	WT/WT	Normal (Clear)
Von Willebrand Disease III Scottish Terrier Type	WT/WT	Normal (Clear)
Von Willebrand Disease III Shetland Sheepdog Type	WT/WT	Normal (Clear)

Sha (Sally)

Chf

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Laboratory & Scientific Director

Medical Director

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. Because all tests are preformed are DNA-base, 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.