

## **Customer & Pet Information**

Kirk	DOB	Nov. 17, 2021
Schaefer's To Boldy Go,	Registration #	DN69205105
BCAT, TKN	Tattoo	-
Miniature American	Microchip	900235000073762
	Laboratory #	425679
Tonya Schaefer	Report Date	Nov. 30, 2023
	Schaefer's To Boldy Go, BCAT, TKN Miniature American Shepherd Male	Schaefer's To Boldy Go, BCAT, TKNRegistration # TattooMiniature American ShepherdMicrochip Laboratory # Report Date

WT: (wild type (normal)) M: (mutant)

Y: (Y chromosome (male))

Breed Profile		
Disease Name	Genotype	Interpretation
Coagulation Factor VII Deficiency	WT/WT	Normal (Clear)
Collie Eye Anomaly	WT/WT	Normal (Clear)
Cone Degeneration	WT/WT	Normal (Clear)
Craniomandibular Osteopathy	WT/WT	Normal (Clear)
Degenerative Myelopathy	WT/WT	Normal (Clear)
Degenerative Myelopathy (Bernese Mountain Dog Variant)	0	
Degenerative Myelopathy (Common Variant)	0	
Exercise-Induced Collapse	WT/WT	Normal (Clear)
Hereditary Ataxia (Australian Shepherd Type)	WT/WT	Normal (Clear)
Hereditary Cataracts (Australian Shepherd Type)	WT/WT	Normal (Clear)
Hyperuricosuria	WT/WT	Normal (Clear)
Intervertebral Disc Disease Risk Factor and Chondrodystrophy (CDDY with IVDD)	WT/M	At-Risk
Intestinal Cobalamin Malabsorption (Border Collie Type)	WT/WT	Normal (Clear)
Junctional Epidermolysis Bullosa (Australian Shepherd Type)	WT/WT	Normal (Clear)
Multidrug Resistance 1	WT/WT	Normal (Clear)

	WT: (wild type (normal)	) M; (mutant ) Y; (Y chromosome (male))
Von Willebrand Disease I	WT/WT	Normal (Clear)
Degeneration (prcd)		Homai (Cicar)
Progressive Retinal Atrophy, Progressive Rod-Cone	WT/WT	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd Type)	WT/WT	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 6	WT/WT	Normal (Clear)
Neuronal Ceroid Lipofuscinosis 5 (Herding Dog Type)	WT/WT	Normal (Clear)
Multifocal Retinopathy 1	WT/WT	Normal (Clear)

## **Coat Colors & Traits**

Trait Name A Locus (Agouti)	Genotype a <sup>t</sup> /a <sup>t</sup>	Interpretation Tricolor, black and tan
A <sup>s</sup> Locus (Saddle Tan)	N/N	No saddle tan/creeping tan
B Locus (Brown)	B/b or b/b	Black or brown coat, nose and foot pads (carries at least one copy of brown)
B Locus (Brown) - b <sup>a</sup>	0	
B Locus (Brown) - b <sup>c</sup>	1	
B Locus (Brown) - b <sup>d</sup>	1	
B Locus (Brown) - b <sup>h</sup>	0	
B Locus (Brown) - b <sup>e</sup>	0	
B Locus (Brown) - b <sup>s</sup>	0	
Brachycephaly	BR/br	Likely medium to long muzzle (short muzzle carrier)
Chondrodysplasia (CDPA)	No Result	No Result
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 <sup>1</sup>	Non-dilute (carries one copy of dilute)
D Locus (Dilute) - d <sup>1</sup>	1	
D Locus (Dilute) - d <sup>2</sup>	0	
D Locus (Dilute) - d <sup>3</sup>	0	
E Locus	E <sup>m</sup> /E	Melanistic Mask - Carrier (Black)
E Locus - E <sup>m</sup> (Melanistic Mask)	1	
E Locus - E <sup>g</sup> (Grizzle, Afghan Hound Type)	0	
E Locus - E <sup>h</sup> (Sable, Cocker Spaniel Type)	0	
E Locus - e <sup>A</sup> (Ancient Red, Spitz and Scent Hound Type)	0	
E Locus - e <sup>1</sup> (Yellow/Red)	0	
E Locus - e <sup>2</sup> (Cream, Australian Cattle Dog Type)	0	
E Locus - e <sup>3</sup> (White, Alaskan and Siberian Husky Type)	0	
H Locus (Harlequin, Great Dane Type)	h/h	No harlequin
Hairlessness	Rh/Rh	Coated
Hairlessness (American Hairless Terrier Type) - rh <sup>1</sup>	0	
Hairlessness (Scottish Deerhound Type) - rh <sup>2</sup>	0	
Hr Locus (FOXI3 Hairless Gene Test, Mexican Hairless, Peruvian Hairless and Chinese Crested Type)	hr/hr	Coated
l Locus (Intensity)	I/I	Normal intensity
IC Locus (Improper Cost (Furnishings)		No furnishings, improper
IC Locus (Improper Coat/Furnishings)	IC/IC	coat
K Locus (Dominant Black)	k <sup>y</sup> /k <sup>y</sup>	

L Locus (Long Hair/Fluffy) - Lh <sup>1</sup>	2	
L Locus (Long Hair/Fluffy) - Lh <sup>2</sup>	0	
L Locus (Long Hair/Fluffy) - Lh <sup>3</sup>	0	
L Locus (Long Hair/Fluffy) - Lh <sup>4</sup>	0	
M Locus (Merle)	m/m	Non merle
Polydactyly (Common Variant)	PD/pd	Likely polydactylous with hind dewclaws (typical toes carrier)
Polydactyly (Great Pyrenees Type)	WT/WT	Normal (Clear)
R Locus (Roan/Ticked)	r/r	No roan or ticking
R Locus (Roan/Ticked) - R <sup>Ti</sup>	0	
R Locus (Roan/Ticked) - R	0	
S Locus (White Spotting, Parti, or Piebald)	S/s <sup>p</sup>	Limited white spotting, flas parti, or piebald (carrier)
SD Locus (Shedding)	SD/SD	High shedding
Sex Determination	X/Y	Male
Social Behavior	WT/M; WT/WT	May demonstrate more social behavior
Social Behavior, Variant 1	1	
	0	
Social Behavior, Variant 2	0	

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.

<b>Explanation of Results</b>	
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 cats 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 unacceptable level of tests with no results, you will be contacted for a new sample to repeat the testing.
Please rev	view our testing terms and disclaimers regarding your results.