

Kit type: Premium

ID kit: PKTSMCJVTH  
Test date: 2026-03-18

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## Bubba Murray's Profile

### Pet information

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**Registered name**  
Bubba Murray

**Date of birth**  
2025-07-24

**Sex**  
M

**Neutered**  
No

### Top breeds

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100% Boston Terrier

### Predicted ideal adult weight

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20-33 lbs

### Health summary

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At Risk 0 conditions

Carrier 0 conditions

Clear 268 conditions

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## Breed ancestry

Bubba Murray appears to be 100% Boston Terrier.

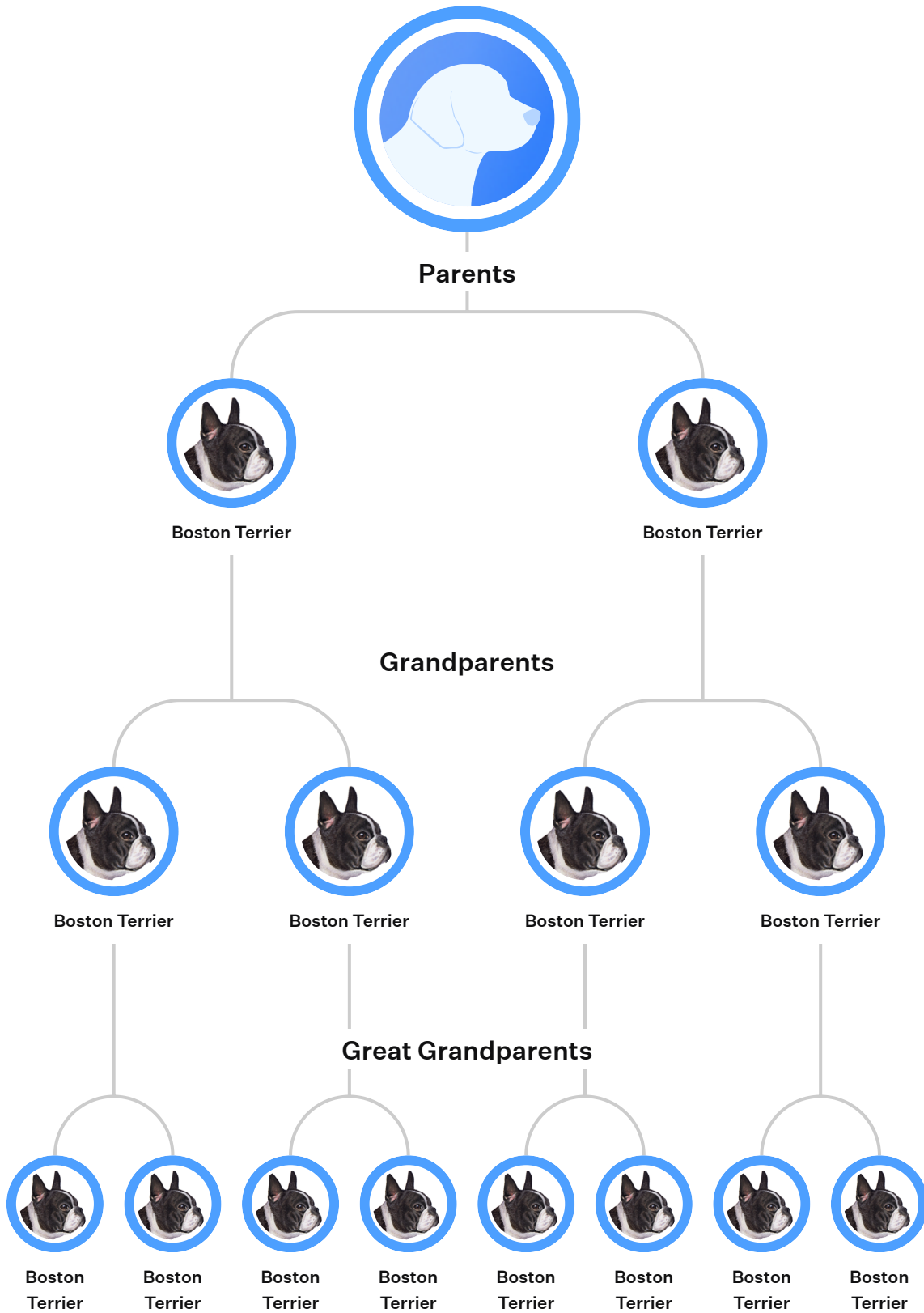


Guard



100% Boston Terrier

Family Tree



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## Genetic Diversity

### Heterozygosity

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#### Bubba Murray's Percentage of Heterozygosity

37%

Bubba Murray's genome analysis shows an average level of genetic heterozygosity when compared with other Boston Terriers.

#### Typical Range for Boston Terriers

31% - 37%

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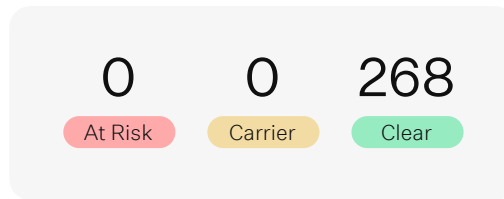
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## Summary of health conditions

### Key Findings

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We detected 0 genetic conditions in Bubba Murray's DNA.



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## Health conditions tested

Genetic Condition	Gene	Risk Variant	Copies	Inheritance	Result
<b>2,8-dihydroxyadenine (DHA) Urolithiasis</b>	APRT	G>A	0	AR	<a href="#">Clear</a>
<b>Acral Mutilation Syndrome</b>	GDNF	C>T	0	AR	<a href="#">Clear</a>
<b>Acute Respiratory Distress Syndrome</b>	ANLN	C>T	0	AR	<a href="#">Clear</a>
<b>Alaskan Husky Encephalopathy</b>	SLC19A3	G>A	0	AR	<a href="#">Clear</a>
<b>Alexander Disease</b>	GFAP	G>A	0	AR	<a href="#">Clear</a>
<b>Amelogenesis Imperfecta (Discovered in the Italian Greyhound)</b>	ENAM	Deletion	0	AR	<a href="#">Clear</a>
<b>Amelogenesis Imperfecta (Discovered in the Lancashire Heeler)</b>	Confidential	-	0	AR	<a href="#">Clear</a>
<b>Amelogenesis Imperfecta (Discovered in the Parson Russell Terrier)</b>	ENAM	C>T	0	AR	<a href="#">Clear</a>
<b>Bandera's Neonatal Ataxia</b>	GRM1	Insertion	0	AR	<a href="#">Clear</a>
<b>Benign Familial Juvenile Epilepsy</b>	LGI2	A>T	0	AR	<a href="#">Clear</a>
<b>Bernard-Soulier Syndrome (Discovered in the Cocker Spaniel)</b>	GP9	Deletion	0	AR	<a href="#">Clear</a>
<b>Canine Congenital Stationary Night Blindness (Discovered in the Beagle)</b>	LRIT3	Deletion	0	AR	<a href="#">Clear</a>
<b>Canine Leukocyte Adhesion Deficiency (CLAD), type III</b>	FERMT3	Insertion	0	AR	<a href="#">Clear</a>
<b>Canine Multifocal Retinopathy 1</b>	BEST1	C>T	0	AR	<a href="#">Clear</a>
<b>Canine Multifocal Retinopathy 2</b>	BEST1	G>A	0	AR	<a href="#">Clear</a>
<b>Canine Multifocal Retinopathy 3</b>	BEST1	Deletion	0	AR	<a href="#">Clear</a>
<b>Canine Multiple Systems Degeneration (Discovered in the Chinese Crested Dog)</b>	SERAC1	Deletion	0	AR	<a href="#">Clear</a>
<b>Canine Scott Syndrome</b>	ANO6	G>A	0	AR	<a href="#">Clear</a>
<b>Cardiomyopathy and Juvenile Mortality (Discovered in the Belgian Shepherd)</b>	YARS2	G>A	0	AR	<a href="#">Clear</a>
<b>Centronuclear Myopathy (Discovered in the Great Dane)</b>	BIN1	A>G	0	AR	<a href="#">Clear</a>

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Genetic Condition	Gene	Risk Variant	Copies	Inheritance	Result
<b>Centronuclear Myopathy (Discovered in the Labrador Retriever)</b>	PTPLA	Insertion	0	AR	Clear
<b>Cerebellar Ataxia</b>	RAB24	A>C	0	AR	Clear
<b>Cerebellar Cortical Degeneration</b>	SNX14	C>T	0	AR	Clear
<b>Cerebellar Hypoplasia</b>	VLDLR	Deletion	0	AR	Clear
<b>Cerebral Dysfunction</b>	SLC6A3	G>A	0	AR	Clear
<b>Chondrodysplasia (Discovered in Norwegian Elkhound and Karelian Bear Dog)</b>	ITGA10	C>T	0	AR	Clear
<b>Chondrodystrophy (CDDY) and Intervertebral Disc Disease (IVDD) Risk</b>	FGF4 retrogene	Insertion	0	AD	Clear
<b>Cleft Lip &amp; Palate with Syndactyly</b>	ADAMTS20	Deletion	0	AR	Clear
<b>Cleft Palate</b>	DLX6	C>A	0	AR	Clear
<b>CNS Atrophy with Cerebellar Ataxia (Discovered in the Belgian Shepherd)</b>	SEPP1	Deletion	0	AR	Clear
<b>Coat Color Dilution and Neurological Defects (Discovered in the Miniature Dachshund)</b>	MYO5A	Insertion	0	AR	Clear
<b>Complement 3 Deficiency</b>	C3	Deletion	0	AR	Clear
<b>Cone Degeneration (Discovered in the Alaskan Malamute)</b>	CNGB3	Deletion	0	AR	Clear
<b>Cone Degeneration (Discovered in the German Shepherd Dog)</b>	CNGA3	C>T	0	AR	Clear
<b>Cone Degeneration (Discovered in the German Shorthaired Pointer)</b>	CNGB3	G>A	0	AR	Clear
<b>Cone-Rod Dystrophy</b>	NPHP4	Deletion	0	AR	Clear
<b>Cone-Rod Dystrophy 1</b>	PDE6B	Deletion	0	AR	Clear
<b>Cone-Rod Dystrophy 2</b>	IQCB1	Insertion	0	AR	Clear
<b>Congenital Cornification (Discovered in the Labrador Retriever)</b>	NSDHL	Deletion	0	XD	Clear

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<b>Congenital Dys hormonogenic Hypothyroidism with Goiter (Discovered in the Shih Tzu)</b>	SLC5A5	G>A	0	AR	Clear
<b>Congenital Eye Malformations (Discovered in the Golden Retriever)</b>	SIX6	C>T	0	AD	Clear
<b>Congenital Hypothyroidism (Discovered in the Tenterfield Terrier)</b>	TPO	C>T	0	AR	Clear
<b>Congenital Hypothyroidism (Discovered in the Toy Fox and Rat Terrier)</b>	TPO	C>T	0	AR	Clear
<b>Congenital Muscular Dystrophy (Discovered in the Italian Greyhound)</b>	LAMA2	G>A	0	AR	Clear
<b>Congenital Muscular Dystrophy (Discovered in the Staffordshire Bull Terrier)</b>	LAMA2	Deletion	0	AR	Clear
<b>Congenital Myasthenic Syndrome (Discovered in the Golden Retriever)</b>	COLQ	G>A	0	AR	Clear
<b>Congenital Myasthenic Syndrome (Discovered in the Heiderterrier)</b>	CHRNE	Insertion	0	AR	Clear
<b>Congenital Myasthenic Syndrome (Discovered in the Jack Russell Terrier)</b>	CHRNE	Insertion	0	AR	Clear
<b>Congenital Myasthenic Syndrome (Discovered in the Labrador Retriever)</b>	COLQ	T>C	0	AR	Clear
<b>Congenital Myasthenic Syndrome (Discovered in the Old Danish Pointer)</b>	CHAT	G>A	0	AR	Clear
<b>Congenital Stationary Night Blindness (CSNB)</b>	RPE65	A>T	0	AR	Clear
<b>Craniomandibular Osteopathy (Discovered in Scottish Terrier breeds)</b>	SLC37A2	C>T	0	AD	Clear
<b>Craniomandibular Osteopathy (Discovered in the Australian Terrier)</b>	COL1A1	C>T	0	AD	Clear
<b>Craniomandibular Osteopathy (Discovered in the Basset Hound)</b>	SLC37A2	C>T	0	AD	Clear
<b>Craniomandibular Osteopathy (Discovered in the Weimaraner)</b>	SLC35D1	Deletion	0	AD	Clear
<b>Cystic Renal Dysplasia and Hepatic Fibrosis</b>	INPP5E	G>A	0	AR	Clear

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<b>Cystinuria Type I-A</b>	SLC3A1	C>T	0	AR	Clear
<b>Cystinuria Type II-A</b>	SLC3A1	Deletion	0	AD	Clear
<b>Darier Disease (Discovered in the Irish Terrier)</b>	ATP2A2	Insertion	0	AD	Clear
<b>Deafness and Vestibular Dysfunction (DINGS1), (Discovered in Doberman Pinscher)</b>	PTPRQ	Insertion	0	AR	Clear
<b>Deafness and Vestibular Dysfunction (DINGS2), (Discovered in Doberman Pinscher)</b>	MYO7A	G>A	0	AR	Clear
<b>Degenerative Myelopathy</b>	SOD1	G>A	0	AR	Clear
<b>Demyelinating Neuropathy</b>	SBF2	G>T	0	AR	Clear
<b>Dental Hypomineralization</b>	FAM20C	C>T	0	AR	Clear
<b>Dental-Skeletal-Retinal Anomaly (Discovered in the Cane Corso)</b>	MIA3	Deletion	0	AR	Clear
<b>Dilated Cardiomyopathy (Discovered in the Schnauzer)</b>	RBM20	Deletion	0	AR	Clear
<b>Disproportionate Dwarfism (Discovered in the Dogo Argentino)</b>	PRKG2	C>A	0	AR	Clear
<b>Dominant Progressive Retinal Atrophy</b>	RHO	C>G	0	AD	Clear
<b>Dystrophic Epidermolysis Bullosa (Discovered in the Basset Hound)</b>	COL7A1	Insertion	0	AR	Clear
<b>Dystrophic Epidermolysis Bullosa (Discovered in the Central Asian Ovcharka)</b>	COL7A1	C>T	0	AR	Clear
<b>Dystrophic Epidermolysis Bullosa (Discovered in the Golden Retriever)</b>	COL7A1	C>T	0	AR	Clear
<b>Early Retinal Degeneration (Discovered in the Norwegian Elkhound)</b>	STK38L	Insertion	0	AR	Clear
<b>Early-Onset Adult Deafness (Discovered in the Rhodesian Ridgeback)</b>	EPS8L2	Deletion	0	AR	Clear
<b>Early-Onset Progressive Polyneuropathy (Discovered in the Alaskan Malamute)</b>	NDRG1	G>T	0	AR	Clear

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<b>Early-Onset Progressive Retinal Atrophy (Discovered in the Portuguese Water Dog)</b>	CCDC66	Insertion	0	AR	Clear
<b>Early-Onset Progressive Retinal Atrophy, (Discovered in the Spanish Water Dog)</b>	PDE6B	Deletion	0	AR	Clear
<b>Ehlers-Danlos Syndrome (Discovered in mixed breed)</b>	COL5A1	G>A	0	AD	Clear
<b>Ehlers-Danlos Syndrome (Discovered in the Labrador Retriever)</b>	COL5A1	Deletion	0	AD	Clear
<b>Epidermolytic Hyperkeratosis</b>	KRT10	G>T	0	AR	Clear
<b>Episodic Falling Syndrome</b>	BCAN	Insertion	0	AR	Clear
<b>Exercise-Induced Collapse</b>	DNM1	G>T	0	AR	Clear
<b>Factor VII Deficiency</b>	F7	G>A	0	AR	Clear
<b>Factor XI Deficiency</b>	FXI	Insertion	0	AD	Clear
<b>Familial Nephropathy (Discovered in the English Cocker Spaniel)</b>	COL4A4	A>T	0	AR	Clear
<b>Familial Nephropathy (Discovered in the English Springer Spaniel)</b>	COL4A4	C>T	0	AR	Clear
<b>Fanconi Syndrome</b>	FAN1	Deletion	0	AR	Clear
<b>Fetal Onset Neuroaxonal Dystrophy</b>	MFN2	G>C	0	AR	Clear
<b>Focal Non-Epidermolytic Palmoplantar Keratoderma</b>	KRT16	G>C	0	AR	Clear
<b>Generalized Progressive Retinal Atrophy (Discovered in the Schapendoes)</b>	CCDC66	Insertion	0	AR	Clear
<b>Glanzmann Thrombasthenia Type I (Discovered in Great Pyrenees)</b>	ITGA2B	C>G	0	AR	Clear
<b>Glanzmann Thrombasthenia Type I (Discovered in mixed breed dogs)</b>	ITGA2B	C>T	0	AR	Clear
<b>Globoid Cell Leukodystrophy (Discovered in Terriers)</b>	GALC	A>C	0	AR	Clear
<b>Globoid Cell Leukodystrophy (Discovered in the Irish Setter)</b>	GALC	A>T	0	AR	Clear

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<b>Glycogen Storage Disease Type Ia (Discovered in the German Pinscher)</b>	G6PC	Insertion	0	AR	Clear
<b>Glycogen Storage Disease Type Ia (Discovered in the Maltese)</b>	G6PC	G>C	0	AR	Clear
<b>Glycogen Storage Disease Type IIIa, (GSD IIIa)</b>	AGL	Deletion	0	AR	Clear
<b>GM1 Gangliosidosis (Discovered in the Portuguese Water Dog)</b>	GLB1	G>A	0	AR	Clear
<b>GM1 Gangliosidosis (Discovered in the Shiba)</b>	GLB1	Deletion	0	AR	Clear
<b>GM2 Gangliosidosis (Discovered in the Japanese Chin)</b>	HEXA	G>A	0	AR	Clear
<b>GM2 Gangliosidosis (Discovered in the Toy Poodle)</b>	HEXB	Deletion	0	AR	Clear
<b>Hemophilia A (Discovered in Old English Sheepdog)</b>	FVIII	C>T	0	XR	Clear
<b>Hemophilia A (Discovered in the Boxer)</b>	FVIII	C>G	0	XR	Clear
<b>Hemophilia A (Discovered in the German Shepherd Dog - Variant 1)</b>	FVIII	G>A	0	XR	Clear
<b>Hemophilia A (Discovered in the German Shepherd Dog - Variant 2)</b>	FVIII	G>A	0	XR	Clear
<b>Hemophilia A (Discovered in the Havanese)</b>	FVIII	Insertion	0	XR	Clear
<b>Hemophilia A (Discovered in the Labrador Retriever)</b>	Confidential	-	0	XR	Clear
<b>Hemophilia B</b>	FIX	G>A	0	XR	Clear
<b>Hemophilia B (Discovered in the Airedale Terrier)</b>	FIX	Insertion	0	XR	Clear
<b>Hemophilia B (Discovered in the Lhasa Apso)</b>	FIX	Deletion	0	XR	Clear
<b>Hereditary Ataxia (Discovered in the Belgian Malinois)</b>	SLC12A6	Insertion	0	AR	Clear
<b>Hereditary Ataxia (Discovered in the Norwegian Buhund)</b>	KCNIP4	T>C	0	AR	Clear
<b>Hereditary Calcium Oxalate Urolithiasis, Type 1</b>	Confidential	-	0	AR	Clear
<b>Hereditary Elliptocytosis</b>	SPTB	C>T	0	AD	Clear

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<b>Hereditary Footpad Hyperkeratosis</b>	FAM83G	G>C	0	AR	Clear
<b>Hereditary Nasal Parakeratosis (Discovered in the Greyhound)</b>	SUV39H2	Deletion	0	AR	Clear
<b>Hereditary Nasal Parakeratosis (Discovered in the Labrador Retriever)</b>	SUV39H2	A>C	0	AR	Clear
<b>Hereditary Vitamin D-Resistant Rickets Type II</b>	VDR	Deletion	0	AR	Clear
<b>Hyperuricosuria</b>	SLC2A9	G>T	0	AR	Clear
<b>Hypocatalasia</b>	CAT	G>A	0	AR	Clear
<b>Hypomyelination</b>	FNIP2	Deletion	0	AR	Clear
<b>Hypophosphatasia</b>	Confidential	-	0	AR	Clear
<b>Ichthyosis (Discovered in the American Bulldog)</b>	NIPAL4	Deletion	0	AR	Clear
<b>Ichthyosis (Discovered in the Great Dane)</b>	SLC27A4	G>A	0	AR	Clear
<b>Ichthyosis Type 2 (Discovered in the Golden Retriever)</b>	ABHD5	Deletion	0	AR	Clear
<b>Inflammatory Myopathy (Discovered in the Dutch Shepherd Dog)</b>	SLC25A12	A>G	0	AR	Clear
<b>Inflammatory Pulmonary Disease (Discovered in the Rough Collie)</b>	AKNA	Deletion	0	AR	Clear
<b>Intestinal Cobalamin Malabsorption (Discovered in the Beagle)</b>	CUBN	Deletion	0	AR	Clear
<b>Intestinal Cobalamin Malabsorption (Discovered in the Border Collie)</b>	CUBN	Deletion	0	AR	Clear
<b>Intestinal Cobalamin Malabsorption (Discovered in the Komondor)</b>	CUBN	G>A	0	AR	Clear
<b>Intestinal Lipid Malabsorption (Discovered in the Australian Kelpie)</b>	ACSL5	Deletion	0	AR	Clear
<b>Junctional Epidermolysis Bullosa (Discovered in the Australian Cattle Dog Mix)</b>	LAMA3	T>A	0	AR	Clear
<b>Junctional Epidermolysis Bullosa (Discovered in the Australian Shepherd)</b>	LAMB3	A>G	0	AR	Clear

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Juvenile Cataract (Discovered in the Wirehaired Pointing Griffon)	FYCO1	Deletion	0	AR	Clear
Juvenile Dilated Cardiomyopathy (Discovered in the Toy Manchester Terrier)	ABCC9	G>A	0	AR	Clear
Juvenile Encephalopathy (Discovered in the Parson Russell Terrier)	Confidential	-	0	AR	Clear
Juvenile Laryngeal Paralysis and Polyneuropathy	RAB3GAP1	Deletion	0	AR	Clear
Juvenile Myoclonic Epilepsy	DIRAS1	Deletion	0	AR	Clear
L-2-Hydroxyglutaric aciduria (Discovered in the Staffordshire Bull Terrier)	L2HGDH	T>C	0	AR	Clear
L-2-Hydroxyglutaric Aciduria (Discovered in the West Highland White Terrier)	Confidential	-	0	AR	Clear
Lagotto Storage Disease	ATG4D	G>A	0	AR	Clear
Lamellar Ichthyosis	TGM1	Insertion	0	AR	Clear
Laryngeal Paralysis (Discovered in the Bull Terrier and Miniature Bull Terrier)	RAPGEF6	Insertion	0	AR	Clear
Leigh-like Subacute Necrotizing Encephalopathy (Discovered in the Yorkshire Terrier)	SLC19A3	Insertion	0	AR	Clear
Lethal Acrodermatitis (Discovered in the Bull Terrier)	MKLN1	A>C	0	AR	Clear
Leukodystrophy (Discovered in the Standard Schnauzer)	TSEN54	C>T	0	AR	Clear
Ligneous Membranitis	PLG	T>A	0	AR	Clear
Limb-girdle Muscular Dystrophy (Discovered in the Boston Terrier) Variant 1	SGCD	Deletion	0	AR	Clear
Limb-girdle Muscular Dystrophy (Discovered in the Boston Terrier) Variant 2	SGCD	CAT>GG	0	AR	Clear
Limb-girdle Muscular Dystrophy, Type L3 (Discovered in the Miniature Dachshund)	SGCA	G>A	0	AR	Clear
Lung Developmental Disease (Discovered in the Airedale Terrier)	LAMP3	C>T	0	AR	Clear

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<b>Macrothrombocytopenia (Discovered in Norfolk and Cairn Terrier)</b>	TUBB1	G>A	0	AR	Clear
<b>May-Hegglin Anomaly</b>	MYH9	G>A	0	AD	Clear
<b>MDR1 Medication Sensitivity</b>	MDR1/ABCB1	Deletion	0	AD	Clear
<b>Microphthalmia (Discovered in the Soft-Coated Wheaten Terrier)</b>	RBP4	Deletion	0	AR	Clear
<b>Mucopolysaccharidosis Type IIIA (Discovered in the Dachshund)</b>	SGSH	C>A	0	AR	Clear
<b>Mucopolysaccharidosis Type IIIA (Discovered in the New Zealand Huntaway)</b>	SGSH	Insertion	0	AR	Clear
<b>Mucopolysaccharidosis Type IIIB (Discovered in the Schipperke)</b>	NAGLU	Insertion	0	AR	Clear
<b>Mucopolysaccharidosis Type VII (Discovered in the Brazilian Terrier)</b>	GUSB	C>T	0	AR	Clear
<b>Mucopolysaccharidosis Type VII (Discovered in the German Shepherd Dog)</b>	GUSB	G>A	0	AR	Clear
<b>Mucopolysaccharidosis VI (Discovered in the Miniature Pinscher)</b>	ARSB	G>A	0	AR	Clear
<b>Muscular Dystrophy (Discovered in the Cavalier King Charles Spaniel)</b>	Dystrophin	G>T	0	XR	Clear
<b>Muscular Dystrophy (Discovered in the Golden Retriever)</b>	Dystrophin	A>G	0	XR	Clear
<b>Muscular Dystrophy (Discovered in the Labrador Retriever) Variant 1</b>	COL6A3	G>A	0	AR	Clear
<b>Muscular Dystrophy (Discovered in the Landseer)</b>	COL6A1	G>T	0	AR	Clear
<b>Muscular Dystrophy (Discovered in the Norfolk Terrier)</b>	Dystrophin	Deletion	0	XR	Clear
<b>Muscular Dystrophy-Dystroglycanopathy (Discovered in the Labrador Retriever)</b>	LARGE	C>T	0	AR	Clear
<b>Muscular Hypertrophy (Double Muscling)</b>	MSTN	T>A	0	AR	Clear
<b>Musladin-Lueke Syndrome</b>	ADAMTSL2	C>T	0	AR	Clear

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<b>Myeloperoxidase Deficiency</b>	MOP	C>T	0	AR	Clear
<b>Myotonia Congenita (Discovered in Australian Cattle Dog)</b>	CLCN1	Insertion	0	AR	Clear
<b>Myotonia Congenita (Discovered in the Labrador Retriever)</b>	CLCN1	T>A	0	AR	Clear
<b>Myotonia Congenita (Discovered in the Miniature Schnauzer)</b>	CLCN1	C>T	0	AR	Clear
<b>Myotubular Myopathy</b>	MTM1	A>C	0	XR	Clear
<b>Narcolepsy (Discovered in the Dachshund)</b>	HCRTR2	G>A	0	AR	Clear
<b>Narcolepsy (Discovered in the Labrador Retriever)</b>	HCRTR2	G>A	0	AR	Clear
<b>Nemaline Myopathy</b>	NEB	C>A	0	AR	Clear
<b>Neonatal Cerebellar Cortical Degeneration</b>	SPTBN2	Deletion	0	AR	Clear
<b>Neonatal Encephalopathy with Seizures</b>	ATF2	T>G	0	AR	Clear
<b>Neuroaxonal Dystrophy (Discovered in Spanish Water Dog)</b>	TECPR2	C>T	0	AR	Clear
<b>Neuroaxonal Dystrophy (Discovered in the Papillon)</b>	PLA2G6	G>A	0	AR	Clear
<b>Neuroaxonal Dystrophy (Discovered in the Rottweiler)</b>	VPS11	A>G	0	AR	Clear
<b>Neuronal Ceroid Lipofuscinosis 1</b>	PPT1	Insertion	0	AR	Clear
<b>Neuronal Ceroid Lipofuscinosis 12 (Discovered in the Australian Cattle Dog)</b>	ATP13A2	C>T	0	AR	Clear
<b>Neuronal Ceroid Lipofuscinosis 5 (Discovered in the Border Collie)</b>	CLN5	C>T	0	AR	Clear
<b>Neuronal Ceroid Lipofuscinosis 5 (Discovered in the Golden Retriever)</b>	CLN5	Deletion	0	AR	Clear
<b>Neuronal Ceroid Lipofuscinosis 7</b>	MFSD8	Deletion	0	AR	Clear
<b>Neuronal Ceroid Lipofuscinosis 8 (Discovered in the Alpine Dachsbracke)</b>	CLN8	Deletion	0	AR	Clear

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<b>Neuronal Ceroid Lipofuscinosis 8 (Discovered in the Australian Shepherd)</b>	CLN8	G>A	0	AR	Clear
<b>Neuronal Ceroid Lipofuscinosis 8 (Discovered in the English Setter)</b>	CLN8	T>C	0	AR	Clear
<b>Neuronal Ceroid Lipofuscinosis 8 (Discovered in the Saluki)</b>	CLN8	Insertion	0	AR	Clear
<b>Obesity risk (POMC)</b>	POMC	Deletion	0	AD	Clear
<b>Osteochondrodysplasia</b>	SLC13A1	Deletion	0	AR	Clear
<b>Osteochondromatosis (Discovered in the American Staffordshire Terrier)</b>	EXT2	C>A	0	AR	Clear
<b>Osteogenesis Imperfecta (Discovered in the Beagle)</b>	COL1A2	C>T	0	AD	Clear
<b>Osteogenesis Imperfecta (Discovered in the Dachshund)</b>	SERPINH1	T>C	0	AR	Clear
<b>P2RY12-associated Bleeding Disorder</b>	P2RY12	Deletion	0	AR	Clear
<b>Palmoplantar Hyperkeratosis (Discovered in the Rottweiler)</b>	DSG1	Deletion	0	AR	Clear
<b>Paroxysmal Dyskinesia</b>	PIGN	C>T	0	AR	Clear
<b>Persistent Müllerian Duct Syndrome</b>	AMHR2	C>T	0	AR	Clear
<b>Phosphofructokinase Deficiency</b>	PFKM	G>A	0	AR	Clear
<b>Pituitary Dwarfism (Discovered in the Karelian Bear Dog)</b>	POU1F1	C>A	0	AR	Clear
<b>Polycystic Kidney Disease</b>	PKD1	G>A	0	AD	Clear
<b>Prekallikrein Deficiency</b>	KLKB1	T>A	0	AR	Clear
<b>Primary Ciliary Dyskinesia</b>	CCDC39	C>T	0	AR	Clear
<b>Primary Ciliary Dyskinesia (Discovered in the Alaskan Malamute)</b>	NME5	Deletion	0	AR	Clear
<b>Primary Lens Luxation</b>	ADAMTS17	G>A	0	AR	Clear
<b>Primary Open Angle Glaucoma (Discovered in Basset Fauve de Bretagne)</b>	ADAMTS17	G>A	0	AR	Clear

Kit type: Premium

ID kit: PKTSMCJVTH

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## Health conditions tested

Genetic Condition	Gene	Risk Variant	Copies	Inheritance	Result
<b>Primary Open Angle Glaucoma (Discovered in Petit Basset Griffon Vendeen)</b>	ADAMTS17	Insertion	0	AR	Clear
<b>Primary Open Angle Glaucoma and Lens Luxation (Discovered in Chinese Shar-Pei)</b>	ADAMTS17	Deletion	0	AR	Clear
<b>Progressive Early-Onset Cerebellar Ataxia</b>	SEL1L	T>C	0	AR	Clear
<b>Progressive Retinal Atrophy (Discovered in the Basenji)</b>	SAG	T>C	0	AR	Clear
<b>Progressive Retinal Atrophy (Discovered in the Golden Retriever - GR-PRA 2 variant)</b>	TTC8	Deletion	0	AR	Clear
<b>Progressive Retinal Atrophy (Discovered in the Golden Retriever - GR-PRA1 variant)</b>	SLC4A3	Insertion	0	AR	Clear
<b>Progressive Retinal Atrophy (Discovered in the Lapponian Herder)</b>	IFT122	C>T	0	AR	Clear
<b>Progressive Retinal Atrophy (Discovered in the Lhasa Apso)</b>	IMPG2	Insertion	0	AR	Clear
<b>Progressive Retinal Atrophy (Discovered in the Papillon and Phalène)</b>	CNGB1	Deletion	0	AR	Clear
<b>Progressive Retinal Atrophy (Discovered in the Shetland Sheepdog - BBS2 variant)</b>	Confidential	-	0	AR	Clear
<b>Progressive Retinal Atrophy (Discovered in the Shetland Sheepdog - CNGA1 variant)</b>	CNGA1	Deletion	0	AR	Clear
<b>Progressive Retinal Atrophy (Discovered in the Swedish Vallhund)</b>	MERTK	Insertion	0	AR	Clear
<b>Progressive Retinal Atrophy 1 (Discovered in the Italian Greyhound)</b>	Confidential	-	0	AR	Clear
<b>Protein Losing Nephropathy</b>	NPHS1	G>A	0	AR	Clear
<b>Pyruvate Dehydrogenase Phosphatase 1 Deficiency</b>	PDP1	C>T	0	AR	Clear
<b>Pyruvate Kinase Deficiency (Discovered in the Basenji)</b>	PKLR	Deletion	0	AR	Clear
<b>Pyruvate Kinase Deficiency (Discovered in the Beagle)</b>	PKLR	G>A	0	AR	Clear
<b>Pyruvate Kinase Deficiency (Discovered in the Pug)</b>	PKLR	T>C	0	AR	Clear

Kit type: Premium

ID kit: PKTSMCJVTH  
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## Health conditions tested

Genetic Condition	Gene	Risk Variant	Copies	Inheritance	Result
<b>Pyruvate Kinase Deficiency (Discovered in the West Highland White Terrier)</b>	PKLR	Insertion	0	AR	Clear
<b>QT Syndrome</b>	KCNQ1	C>A	0	AD	Clear
<b>Renal Cystadenocarcinoma and Nodular Dermatofibrosis</b>	FLCN	A>G	0	AD	Clear
<b>Rod-Cone Dysplasia 1</b>	PDE6B	G>A	0	AR	Clear
<b>Rod-Cone Dysplasia 1a</b>	PDE6B	Insertion	0	AR	Clear
<b>Rod-Cone Dysplasia 3</b>	PDE6A	Deletion	0	AR	Clear
<b>Sensorineural Deafness (Discovered in the Rottweiler)</b>	LOXHD1	G>C	0	AR	Clear
<b>Sensory Neuropathy</b>	FAM134B	Insertion	0	AR	Clear
<b>Severe Combined Immunodeficiency (Discovered in Frisian Water Dogs)</b>	RAG1	G>T	0	AR	Clear
<b>Severe Combined Immunodeficiency (Discovered in Russell Terriers)</b>	PRKDC	G>T	0	AR	Clear
<b>Shaking Puppy Syndrome (Discovered in the Border Terrier)</b>	Confidential	-	0	AR	Clear
<b>Skeletal Dysplasia 2</b>	COL11A2	G>C	0	AR	Clear
<b>Spinocerebellar Ataxia (Discovered in the Alpine Dachsbracke)</b>	SCN8A	G>T	0	AR	Clear
<b>Spinocerebellar Ataxia (Late-Onset Ataxia)</b>	CAPN1	G>A	0	AR	Clear
<b>Spinocerebellar Ataxia with Myokymia and/or Seizures</b>	KCNJ10	C>G	0	AR	Clear
<b>Spondylocostal Dysostosis</b>	HES7	Deletion	0	AR	Clear
<b>Spongy Degeneration with Cerebellar Ataxia (Discovered in Belgian Malinois - SDCA1)</b>	KCNJ10	T>C	0	AR	Clear
<b>Spongy Degeneration with Cerebellar Ataxia (Discovered in Belgian Malinois - SDCA2)</b>	ATP1B2	Insertion	0	AR	Clear
<b>Stargardt Disease (Discovered in the Labrador Retriever)</b>	ABCA4	Insertion	0	AR	Clear

Kit type: Premium

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## Health conditions tested

Genetic Condition	Gene	Risk Variant	Copies	Inheritance	Result
<b>Startle Disease (Discovered in Irish Wolfhounds)</b>	SLC6A5	G>T	0	AR	<a href="#">Clear</a>
<b>Startle Disease (Discovered in the Miniature American Shepherd)</b>	Confidential	-	0	AR	<a href="#">Clear</a>
<b>Succinic Semialdehyde Dehydrogenase Deficiency (Discovered in the Saluki)</b>	ALDH5A1	G>A	0	AR	<a href="#">Clear</a>
<b>Thrombopathia (Discovered in the Basset Hound)</b>	RASGRP1	Deletion	0	AR	<a href="#">Clear</a>
<b>Thrombopathia (Discovered in the Eskimo Spitz)</b>	RASGRP1	Insertion	0	AR	<a href="#">Clear</a>
<b>Trapped Neutrophil Syndrome</b>	VPS13B	Deletion	0	AR	<a href="#">Clear</a>
<b>Van den Ende-Gupta Syndrome</b>	SCARF2	Deletion	0	AR	<a href="#">Clear</a>
<b>von Willebrand's Disease, type 1</b>	VWF	G>A	0	AD	<a href="#">Clear</a>
<b>von Willebrand's Disease, type 2</b>	VWF	T>G	0	AR	<a href="#">Clear</a>
<b>von Willebrand's Disease, type 3 (Discovered in the Kooiker Hound)</b>	VWF	G>A	0	AR	<a href="#">Clear</a>
<b>von Willebrand's Disease, type 3 (Discovered in the Scottish Terrier)</b>	VWF	Deletion	0	AR	<a href="#">Clear</a>
<b>von Willebrand's Disease, type 3 (Discovered in the Shetland Sheepdog)</b>	VWF	Deletion	0	AR	<a href="#">Clear</a>
<b>X-Linked Ectodermal Dysplasia</b>	EDA	G>A	0	XR	<a href="#">Clear</a>
<b>X-Linked Hereditary Nephropathy (Discovered in the Navasota Dog)</b>	COL4A5	Deletion	0	XR	<a href="#">Clear</a>
<b>X-Linked Hereditary Nephropathy (Discovered in the Samoyed)</b>	COL4A5	G>T	0	XR	<a href="#">Clear</a>
<b>X-Linked Myotubular Myopathy</b>	MTM1	C>A	0	XR	<a href="#">Clear</a>
<b>X-Linked Progressive Retinal Atrophy 1</b>	RPGR	Deletion	0	XR	<a href="#">Clear</a>
<b>X-Linked Progressive Retinal Atrophy 2</b>	RPGR	Deletion	0	XR	<a href="#">Clear</a>
<b>X-Linked Severe Combined Immunodeficiency (Discovered in the Basset Hound)</b>	IL2RG	Deletion	0	XR	<a href="#">Clear</a>

Kit type: Premium

ID kit: PKTSMCJVTH

Test date: 2026-03-18

## Health conditions tested

Genetic Condition	Gene	Risk Variant	Copies	Inheritance	Result
<b>X-Linked Severe Combined Immunodeficiency (Discovered in the Cardigan Welsh Corgi)</b>	IL2RG	Insertion	0	XR	Clear
<b>X-Linked Tremors</b>	PLP1	A>C	0	XR	Clear
<b>Xanthinuria (Discovered in a mixed breed dog)</b>	Confidential	-	0	AR	Clear
<b>Xanthinuria (Discovered in the Cavalier King Charles Spaniel)</b>	Confidential	-	0	AR	Clear
<b>Xanthinuria (Discovered in the Toy Manchester Terrier)</b>	Confidential	-	0	AR	Clear

Kit type: Premium

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## Traits

### Coat Color

	Gene	Variant	Copies	Result
<b>Fawn</b> Copies of this variant will cause dogs to show fawn if they do not have other variant that will mask this effect, such as a plain red, black or white coat.	ASIP	a <sup>v</sup>	2	Fawn possible
<b>Recessive Black</b>	ASIP	a	0	No effect
<b>Tan Points</b>	ASIP	a <sup>t</sup>	0	No effect
<b>Dominant Black</b> One or two copies of the dominant black will give a dog a black coat (depending on other variants), black eye rims, nose and pads. One copy may also give a tiger striped appearance, known as brindle patterning.	CBD103	K <sup>B</sup>	1	Black or brindle possible
<b>Mask</b> One or two copies of the Mask mutation will result in the presence of a dark facial mask covering the muzzle. This mask can cover only the very front of the muzzle, or can extend down to the chest and front legs. Mask can be hidden by other trait variants.	MC1R	E <sup>m</sup>	1	Dark Muzzle possible
<b>Recessive Red (e1)</b>	MC1R	e <sup>1</sup>	0	No effect
<b>Recessive Red (e2)</b>	MC1R	e <sup>2</sup>	0	No effect
<b>Recessive Red (e3)</b>	MC1R	e <sup>3</sup>	0	No effect
<b>Sable (Discovered in the Cocker Spaniel)</b>	MC1R	e <sup>H</sup>	0	No effect
<b>Widow's Peak (Discovered in Ancient dogs)</b>	MC1R	e <sup>A</sup>	0	No effect
<b>Widow's Peak (Discovered in the Afghan Hound and Saluki)</b>	MC1R	e <sup>G</sup>	0	No effect

### Color Modification

	Gene	Variant	Copies	Result
<b>Cocoa (Discovered in the French Bulldog)</b>	HPS3	co	0	No effect

Kit type: Premium

ID kit: PKTSMCJVTH

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## Color Modification

	Gene	Variant	Copies	Result
<p><b>Red Intensity</b></p> <p>Dogs with two copies of the Red Intensity variant are more likely to show yellow, cream or white coat shades instead of deeper red shades. If the dog does not display solid red or red coat patterns, there will be no visible effect. Other genes, notably variants in the KITLG gene, are also thought to contribute to red pigment intensity variation, so some dogs may have yellow or buff colored coats.</p>	MFSD12	i	1	No effect
<p><b>Dilution (d1) Linkage test</b></p> <p>To show coat color dilution, a dog must inherit two copies of a dilution variant, one from each parent. This can either be two copies of a particular variant, such as this one (d1) or two of any combination of dilution variants. This variant (d1) is the most common dilution variant in dogs. The test for d1 is a linkage test, that measures markers close to the d1 variant to determine the most likely d1 genotype. The test is 99.2% accurate based on a set of over 3000 breed and mixed breed dogs with a known d1 genotype.</p>	MLPH	d <sup>1</sup>	2	Dilution likely
<p><b>Dilution (d2)</b></p>	MLPH	d <sup>2</sup>	0	No effect
<p><b>Dilution (d3)</b></p>	MLPH	d <sup>3</sup>	0	No effect
<p><b>Chocolate (basd)</b></p>	TYRP1	b <sup>asd</sup>	0	No effect
<p><b>Chocolate (bc)</b></p>	TYRP1	b <sup>c</sup>	0	No effect
<p><b>Chocolate (bd)</b></p>	TYRP1	b <sup>d</sup>	0	No effect
<p><b>Chocolate (be)</b></p>	TYRP1	b <sup>e</sup>	0	No effect
<p><b>Chocolate (bh)</b></p>	TYRP1	b <sup>h</sup>	0	No effect
<p><b>Chocolate (bs)</b></p> <p>To show chocolate coloration a dog must inherit two chocolate variants, one from each parent. This can either be two copies of a particular variant, such as this one ("bs"), or two of any combination of chocolate variants.</p>	TYRP1	b <sup>s</sup>	1	Black features likely, chocolate possible

Kit type: Premium

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## Coat Patterns

	Gene	Variant	Copies	Result
<b>Piebald</b>	MITF	sp	0	No effect
<b>Merle</b>	PMEL	M	0	No effect
<b>Harlequin</b>	PSMB7	H	0	No effect
<b>Saddle Tan</b>	RALY	-	2	Saddle possible
<p>One or two copies of the Saddle Tan variant are needed for the "saddle" to be seen. However the Tan Points variant must also be present. The Saddle Tan variant is actually considered to be the wild type, or default, variant.</p>				
<b>Roan Linkage Test</b>	USH2A	TR <sup>r</sup>	0	No effect

## Coat Length and Curl

	Gene	Variant	Copies	Result
<b>Long Hair (lh1)</b>	FGF5	lh <sup>1</sup>	0	No effect
<b>Long Hair (lh2)</b>	FGF5	lh <sup>2</sup>	0	No effect
<b>Long Hair (lh3)</b>	FGF5	lh <sup>3</sup>	0	No effect
<b>Long Hair (lh4)</b>	FGF5	lh <sup>4</sup>	0	No effect
<b>Long Hair (lh5)</b>	FGF5	lh <sup>5</sup>	0	No effect
<b>Curly Coat</b>	KRT71	C	0	No effect

## Hairlessness

	Gene	Variant	Copies	Result
<b>Hairlessness (Discovered in the Chinese Crested Dog) Linkage test</b>	FOXI3	H <sup>rec</sup>	0	No effect
<b>Hairlessness (Discovered in the American Hairless Terrier)</b>	SGK3	h <sup>raht</sup>	0	No effect
<b>Hairlessness (Discovered in the Scottish Deerhound)</b>	SKG3	h <sup>rsd</sup>	0	No effect

Kit type: Premium

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## Shedding

	Gene	Variant	Copies	Result
<p><b>Reduced Shedding</b></p> <p>One or two copies of the Reduced Shedding variant is likely to reduce a dog's tendency to shed. Copies of the Furnishings variant, particularly two, also reduce the tendency of a dog to shed.</p>	MC5R	sd	2	Low shedder

## More Coat Traits

	Gene	Variant	Copies	Result
<p><b>Hair Ridge</b></p>	FGF3, FGF4, FGF19, ORAOV1	R	0	No effect
<p><b>Furnishings</b></p>	RSPO2	F	0	No effect
<p><b>Albino</b></p>	SLC45A2	c <sup>al</sup>	0	No effect

## Head Shape

	Gene	Variant	Copies	Result
<p><b>Short Snout (BMP3 variant)</b></p> <p>Having two copies of this variant may have a slight shortening effect on snout length.</p>	BMP3	-	2	Shortened snout likely
<p><b>Short Snout (SMOC2 variant)</b></p> <p>Copies of this skull shape variant usually results in a shorter snout, whereas dogs with no copies of this variant tend to have a longer snout.</p>	SMOC2	-	2	Shortened snout likely

## Eye Color

	Gene	Variant	Copies	Result
<p><b>Blue Eyes (Discovered in the Siberian Husky)</b></p>	ALX4	-	0	No effect

Kit type: Premium

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## Ears

	Gene	Variant	Copies	Result
<b>Floppy Ears</b>	MSRB3	-	0	Pricked ears more likely

## Extra Toes

	Gene	Variant	Copies	Result
<b>Hind Dewclaws (Discovered in Asian breeds)</b>	LMBR1	DC-1	0	No effect
<b>Hind Dewclaws (Discovered in Western breeds)</b>	LMBR1	DC-2	0	No effect

## More Body Features

	Gene	Variant	Copies	Result
<b>Back Muscle and Bulk</b>	ACSL4	-	0	No effect
<b>High Altitude Adaptation</b>	EPAS1	-	0	No effect
<b>Short Legs (Chondrodysplasia, CDPA)</b>	FGF4	-	0	No effect
<b>Short Legs (Chondrodystrophy, CDDY)</b>	FGF4	-	0	No effect
<b>Short Tail</b>	T-box	T	0	Full tail length likely

Kit type: Premium

ID kit: PKTSMCJVTH

Test date: 2026-03-18

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## Glossary of genetic terms

### Test result definitions

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**At Risk:** Based on the disorder's mode of inheritance, the dog inherited a number of genetic variant(s) which increases the dog's risk of being diagnosed with the associated disorder.

**Carrier:** The dog inherited one copy of a genetic variant when two copies are usually necessary to increase the dog's risk of being diagnosed with the associated disorder. While carriers are usually not at risk of clinical expression of the disorder, carriers of some complex variants may be associated with a low risk of developing the disorder.

**Clear:** The dog did not inherit the genetic variant(s) associated with the disorder and will not be at elevated risk of being diagnosed with the disorder due to this genotype. However, similar clinical signs could develop from different genetic or clinical causes.

**Inconclusive:** An inconclusive result indicates a confident call could not be made based on the data for that genetic variant. Health testing is performed in replicates, and on occasion the outcomes do not agree. This may occur due to an unusual sequence of DNA in the region tested, multiple cell genotypes present due to chimerism or acquired mutations, or due to quality of the DNA sample.

### Inheritance mode definitions

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**Autosomal Recessive (AR):** For autosomal recessive disorders, dogs with two copies of the genetic variant are at risk of developing the associated disorder. Dogs with one copy of the variant are considered carriers and are usually not at risk of developing the disorder. However, carriers of some complex variants grouped in this category may be associated with a low risk of developing the disorder. Dogs with one or two copies may pass the disorder-associated variant to their puppies if bred.

**Autosomal Dominant (AD):** For autosomal dominant disorders, dogs with one or two copies of the genetic variant are at risk of developing the associated disorder. Inheriting two copies of the variant may increase the risk of development of the disorder or cause the condition to be more severe. These dogs may pass the disorder-associated variant to their puppies if bred.

**X-linked Recessive (XR):** For X-linked recessive disorders, the genetic variant is found on the X chromosome. Female dogs must inherit two copies of the variant to be at risk of developing the condition, whereas male dogs only need one copy to be at risk. Males and females with any copies of the variant may pass the disorder-associated variant to their puppies if bred.

**X-linked Dominant (XD):** For X-linked dominant disorders, the genetic variant is found on the X chromosome. Both male and female dogs with one copy of the variant are at risk of developing the disorder. Females inheriting two copies of the variant may be at higher risk or show a more severe form of the disorder than with one copy. Males and females with any copies of the variant may pass the disorder-associated variant to their puppies if bred.

**Mitochondrial (MT):** Unlike the two copies of genomic DNA held in the nucleus, there are thousands of mitochondria in each cell of the body, and each holds its own mitochondrial DNA (mtDNA). Mitochondria are called the "powerhouses" of the cell. For a dog to be at risk for a mitochondrial disorder, it must inherit a certain ratio of mtDNA with the associated variant compared to normal mtDNA. mtDNA is inherited only from the mother.