Gina's Breed + Health Report

Introduction

basepaws
PET GENETICS

Patient Information

Pet Name Gina

Gender Female

Pet Owner Name

Age 1 Year

About This Report

Welcome to the printable version of your pet's report! This document provides a snapshot of the genetic insights we've uncovered about your pet.

To keep this printed version concise and easy to read, we've summarized key findings. For a deeper dive into your pet's breed background and the full report content, we encourage you to visit the report in your Account.

Please note that any Health Predispositions with "At Risk" or "Carrier" status, or Physical Traits at "Likely to Have" or "Carrier" status, will have their own specific page; while those Health Predispositions analyzed as "Clear" or Traits as "Not Likely To Have" will be listed at the end of each section.

Thank you for trusting Basepaws with your pet's genetic journey, we hope this report helps you learn more about what makes your pet unique.

What's Included

- **Summary**
- **Glossary**
- **Breed Analysis**
- **Genetic Health Predispositions**
- **Physical Traits**

Gina's Breed + Health Report

Summary

basepaws
PET GENETICS

Breeds Analysis

100% Italian Greyhound

Genetic Health Predispositions

0 **At Risk**

1 **Carrier**

Amelogenesis Imperfecta, ENAM-related

212 **Clear**

Physical Traits

4 **Likely to Have**

Melanistic Mask

Smaller Body Size

Dilute Coat

Black Coat, CBD103-related

0 **Carrier**

20 **Not Likely to Have**

Glossary

Health Marker Result Definitions

What does “At Risk” mean?
An "At Risk" result should always be shared with your veterinarian and can mean any of the following (below is a non-exhaustive list):

1. Your dog has one or two copies of the specific allele linked to the disease. However, the disease is complex because it is not determined by a single gene, but rather by the interaction of multiple genes and their variations, plus environmental factors.

2. Your dog has one copy of the specific allele linked to the disease, but there is a "gene dosage" effect. Gene dosage refers to the number of copies of a specific allele linked to the disease the dog inherited, and how this can affect the way the disease presents. In relation to a dog's risk, it essentially means that having one copy may cause a milder disease presentation, and having two copies may cause a more severe presentation. An example of a disease with a dosage effect is the bleeding disorder called von Willebrand Disease I.

3. Your dog has one or two copies of an allele associated with a disease inherited in an autosomal dominant fashion, making the possibility of the dog developing the disease highly likely.

4. Your dog has two copies of an allele associated with a disease inherited in an autosomal recessive fashion, making the possibility of the dog developing the disease highly likely.

What does “Carrier” mean?
In most cases, this means that the dog has one copy of an autosomal recessive disease-associated marker (mutated gene allele). For diseases with a recessive inheritance pattern, the dog will develop the disease only if it has two mutated alleles (two copies of the marker). Alternatively, the ‘Carrier’ result may mean that a female dog has one copy of a marker associated with a disease that follows an X-linked recessive inheritance pattern. As a carrier, your patient is not at risk for developing the disease, but its offspring may be at risk.

What does “Clear” mean?
The dog is negative (i.e., has zero copies) for all of the markers for which we tested that are known to be associated with a particular disease. This result, however, should not rule out the need to seek a professional diagnosis by a veterinarian, should the dog develop symptoms connected to this disease. It is still possible that the dog is positive for markers that are yet to be discovered that could be associated with a disease. In some cases, environmental factors could contribute to a dog's potential to develop the disease.

Trait Marker Result Definitions

What does “Likely To Have“ mean?
This status means that your pet tested positive for the trait marker and that they are likely to display the trait. It could be for any of the following reasons:

1. The trait is dominant, and your dog has one or two copies of the gene variant needed to express the trait.

2. The trait is recessive, and your dog has two copies of the gene variant needed (one from each parent) to express the trait.

3. The trait is complex, and your dog has the required combination of the multiple genetic variants needed to express the trait.

What does “Carrier” mean?
Your dog has one copy of a marker associated with a specific physical trait; however, it is unlikely to be physically displaying the trait. This could be because the trait has an autosomal recessive pattern of inheritance (needs two copies to display physically) or because the physical presentation of the trait is associated with a specific combination of markers, of which your dog only has one.

What does “Not Likely To Have” mean?
Based on the your dog’s genotype (collection of genes), it is unlikely that it is exhibiting this particular trait.

Gina's Breed + Health Report

Breed Analysis

basepaws
PET GENETICS

Italian Greyhound

100%

The Italian Greyhound is an ancient breed with origins dating back over 2,000 years. Believed to have been initially bred in the Mediterranean region, it was favored by nobility and depicted in art during the Roman Empire. The breed's elegance and grace made it a popular companion for the aristocracy, and it spread across Europe during the Renaissance. In the 19th century, the Italian Greyhound gained popularity in England and the United States, becoming a cherished pet for many families.

Genetic Health Predispositions

basepaws
PET GENETICS

Disorder

Amelogenesis imperfecta, ENAM-related

Result

Carrier

Category

Other systems

Gene	Identified Copies
ENAM	1 copy

Description

Amelogenesis imperfecta (AI) is characterized by defective tooth enamel production, which can cause discolored teeth and/or teeth that are unusually small and sharp. Affected dogs should not have access to hard chew toys or other objects due to increased risk of tooth damage.

Inheritance

Autosomal Recessive

Signs and Symptoms

Clinical signs of AI include teeth that are hypoplastic (thin enamel), hypomature (normal enamel thickness but discolored and softer than normal enamel), hypocalcified (normal enamel thickness but extremely weak), or a mix of these conditions. Teeth are generally discolored and easily stained. They may be rough and unusually small and sharp, with wider gaps between teeth.

How it is Diagnosed

A veterinarian will conduct a thorough wellness exam that includes an oral examination and evaluation of clinical signs. Genetic testing assists veterinarians with diagnosis and helps breeders identify affected and carrier dogs.

How it is Managed

Supportive management, at-home brushing of teeth, and regular professional dental cleanings as recommended by a veterinarian. Extra caution should be taken with chew toys since enamel production is compromised in affected dogs and teeth are at a higher risk for damage. Hard toys, treats, and other substances that may be consumed orally are not recommended for any dog, but this is especially the case for dogs affected by Amelogenesis imperfecta.

Breeds Prevalence

Italian Greyhound, Parson Russell Terrier

Gina's Breed + Health Report

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Cardiac (4)

Clear

Disorder	Gene	Copies
Cardiomyopathy, YARS2-related	YARS2	0 copies
Dilated cardiomyopathy, RBM20-related	RBM20	0 copies
Dilated cardiomyopathy, TTN-related	TTN	0 copies
Ventricular arrhythmias and sudden death	MICOS13	0 copies

Gina's Breed + Health Report

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Dermatologic (16)

Clear

Disorder	Gene	Copies
Dystrophic epidermolysis bullosa	COL7A1	0 copies
Dystrophic epidermolysis bullosa	COL7A1	0 copies
Epidermolysis bullosa simplex (EBS)	PLEC	0 copies
Hyperkeratosis, DSG1-related	DSG1	0 copies
Hyperkeratosis, FAM83G-related	FAM83G	0 copies
Hyperkeratosis, KRT10-related	KRT10	0 copies
Hypotrichosis	SGK3	0 copies
Ichthyosis, PNPLA1-related	PNPLA1	0 copies
Ichthyosis, SLC27A4-related	SLC27A4	0 copies
Inflammatory linear verrucous epidermal nevi (ILVEN)	NSDHL	0 copies
Inflammatory linear verrucous epidermal nevi (ILVEN)	NSDHL	0 copies
Junctional epidermolysis bullosa, LAMA3-related	LAMA3	0 copies
Junctional epidermolysis bullosa, LAMB3-related	LAMB3	0 copies
Lethal acrodermatitis	MKLN1	0 copies
Nasal parakeratosis	SUV39H2	0 copies
X-linked hypohidrotic ectodermal dysplasia (XHED)	EDA	0 copies

Gina's Breed + Health Report

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Endocrine (6)

Clear

Disorder	Gene	Copies
Congenital Hypothyroidism, SLC5A5-related	SLC5A5	0 copies
Congenital hypothyroidism, TPO-related	TPO	0 copies
Congenital hypothyroidism, TPO-related	TPO	0 copies
Disproportionate dwarfism	PRKG2	0 copies
Dwarfism, GH1-related	GH1	0 copies
Dwarfism, LHX3-related	LHX3	0 copies

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Gastrointestinal (7)

Clear

Disorder	Gene	Copies
Familial Adenomatous Polyposis	APC	0 copies
Gastrointestinal stromal tumor predisposition	KIT	0 copies
Gastrointestinal stromal tumor predisposition	KIT	0 copies
Imerslund-Gräsbeck syndrome, CUBN-related	CUBN	0 copies
Imerslund-Gräsbeck syndrome, CUBN-related	CUBN	0 copies
Imerslund-Gräsbeck syndrome, CUBN-related	CUBN	0 copies
Lundehund syndrome	LEPREL1	0 copies

Gina's Breed + Health Report

Genetic Health Predispositions Tested Clear

basepaws PET GENETICS

Hematologic (34)

Clear

Disorder	Gene	Copies
Bleeding disorder, P2RY12-related	P2RY12	0 copies
Canine Scott syndrome (CSS)	ANO6	0 copies
Elliptocytosis	SPTB	0 copies
Factor VII deficiency	F7	0 copies
Factor XI deficiency	F11	0 copies
Haemophilia A	F8	0 copies
Haemophilia A	F8	0 copies
Haemophilia A	F8	0 copies
Haemophilia A	F8	0 copies
Haemophilia A	F8	0 copies
Haemophilia B	F9	0 copies
Haemophilia B	F9	0 copies
Haemophilia B	F9	0 copies
Haemophilia B	F9	0 copies
Haemophilia B	F9	0 copies
Ligneous membranitis	PLG	0 copies
May-Hegglin anomaly	MYH9	0 copies
Methemoglobinaemia	CYB5R3	0 copies
Methemoglobinaemia	CYB5R3	0 copies
Polycythemia	JAK2	0 copies
Prekallikrein deficiency	KLKB1	0 copies
Thrombasthenia	ITGA2B	0 copies
Thrombasthenia	ITGA2B	0 copies
Thrombocytopaenia	TUBB1	0 copies
Thrombocytopaenia	TUBB1	0 copies
Thrombopathia	RASGRP2	0 copies
Thrombopathia	RASGRP2	0 copies

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Hematologic (34)

Clear

Disorder	Gene	Copies
Thrombopathia	RASGRP2	0 copies
Von Willebrand disease I	VWF	0 copies
Von Willebrand disease II	VWF	0 copies
Von Willebrand disease II	VWF	0 copies
Von Willebrand disease III	VWF	0 copies
Von Willebrand disease III	VWF	0 copies
Von Willebrand disease III	VWF	0 copies

Gina's Breed + Health Report

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Immune (9)

Clear

Disorder	Gene	Copies
C3 deficiency	C3	0 copies
Leukocyte adhesion deficiency, type I	ITGB2	0 copies
Leukocyte adhesion deficiency, type III	FERMT3	0 copies
Leukodystrophy, TSEN54-related	TSEN54	0 copies
Severe combined immunodeficiency disease, DNA-PKcs-related	PRKDC	0 copies
Severe combined immunodeficiency disease, RAG1-related	RAG1	0 copies
Severe combined immunodeficiency disease, X-linked	IL2RG	0 copies
Severe combined immunodeficiency disease, X-linked	IL2RG	0 copies
Trapped Neutrophil Syndrome	VPS13B	0 copies

Gina's Breed + Health Report

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Metabolic (46)

Clear

Disorder	Gene	Copies
Beta-mannosidosis	MANBA	0 copies
Ciliary dyskinesia, CCDC39-related	CCDC39	0 copies
Ciliary dyskinesia, NME5-related	NME5	0 copies
Erythrocytic pyruvate kinase (PK) deficiency	PKLR	0 copies
Erythrocytic pyruvate kinase (PK) deficiency	PKLR	0 copies
Erythrocytic pyruvate kinase (PK) deficiency	PKLR	0 copies
Erythrocytic pyruvate kinase (PK) deficiency	PKLR	0 copies
Erythrocytic pyruvate kinase (PK) deficiency	PKLR	0 copies
Exercise induced metabolic myopathy	ACADVL	0 copies
Gangliosidosis, GM1	GLB1	0 copies
Gangliosidosis, GM1	GLB1	0 copies
Gangliosidosis, GM1	GLB1	0 copies
Gangliosidosis, GM2, type I	HEXA	0 copies
Gangliosidosis, GM2, type II	HEXB	0 copies
Gangliosidosis, GM2, type II	HEXB	0 copies
Glycogen storage disease, type Ia	G6PC1	0 copies
Glycogen storage disease, type Ia	G6PC1	0 copies
Glycogen storage disease, type II	GAA	0 copies
Glycogen storage disease, type IIIA	AGL	0 copies
Glycogen storage disease, type VII	PFKM	0 copies
Glycogen storage disease, type VII	PFKM	0 copies
Hypocatalasia (Acatalasemia)	CAT	0 copies
Menkes disease	ATP7A	0 copies
Menkes disease	ATP7A	0 copies
Mucopolysaccharidosis IIIA	SGSH	0 copies
Mucopolysaccharidosis IIIA	SGSH	0 copies
Mucopolysaccharidosis VI	ARSB	0 copies

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Metabolic (46)

Clear

Disorder	Gene	Copies
Mucopolysaccharidosis VII	GUSB	0 copies
Mucopolysaccharidosis VII	GUSB	0 copies
Neuronal ceroid lipofuscinosis, ARSG-related	ARSG	0 copies
Neuronal ceroid lipofuscinosis, ATP13A2-related	ATP13A2	0 copies
Neuronal ceroid lipofuscinosis, CLN6-related	CLN6	0 copies
Neuronal ceroid lipofuscinosis, CLN8-related	CLN8	0 copies
Neuronal ceroid lipofuscinosis, CLN8-related	CLN8	0 copies
Neuronal ceroid lipofuscinosis, CTSD-related	CTSD	0 copies
Neuronal ceroid lipofuscinosis, MFSD8-related	MFSD8	0 copies
Neuronal ceroid lipofuscinosis, PPT1-related	PPT1	0 copies
Neuronal ceroid lipofuscinosis, TPP1-related	TPP1	0 copies
Pyruvate dehydrogenase deficiency	PDP1	0 copies
Succinic semialdehyde dehydrogenase deficiency	ALDH5A1	0 copies
Wilson's disease, ATP7B-related	ATP7A	0 copies
Wilson's disease, ATP7B-related	ATP7A	0 copies
Xanthinuria, type I	XDH	0 copies
Xanthinuria, type II	MOCOS	0 copies
Xanthinuria, type II	MOCOS	0 copies
Xanthinuria, type II	MOCOS	0 copies

Gina's Breed + Health Report

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Musculoskeletal and connective tissue (39)

Clear

Disorder	Gene	Copies
Australian Labradoodle dystrophinopathy	DMD	0 copies
Centronuclear myopathy	HACD1	0 copies
Chondrodysplasia, FGF4-related	FGF4	0 copies
Chondrodysplasia, ITGA10-related	ITGA10	0 copies
Craniomandibular osteopathy	SLC37A2	0 copies
Craniomandibular osteopathy	SLC37A2	0 copies
Duchenne muscular dystrophy	DMD	0 copies
Duchenne muscular dystrophy	DMD	0 copies
Duchenne muscular dystrophy	DMD	0 copies
Ehlers-Danlos syndrome, classic type	COL5A1	0 copies
Ehlers-Danlos syndrome, classic type	COL5A1	0 copies
Ehlers-Danlos syndrome, classic-like type	TNXB	0 copies
Ehlers-Danlos syndrome, classic-like type	TNXB	0 copies
Ehlers-Danlos syndrome, Dermatosparaxis type	ADAMTS2	0 copies
Exercise-induced collapse syndrome (EIC)	DNM1	0 copies
Hypophosphatasia	ALPL	0 copies
Inflammatory myopathy	SLC25A12	0 copies
Inherited Myopathy of Great Danes (IMGD)	BIN1	0 copies
Limb-girdle muscular dystrophy, type 2F	SGCD	0 copies
Limb-girdle muscular dystrophy, type R3	SGCA	0 copies
Malignant hyperthermia	RYR1	0 copies
Muscular dystrophy-dystroglycanopathy	LARGE	0 copies
Muscular dystrophy, COL6A3-related	COL6A3	0 copies
Muscular dystrophy, COL6A3-related	COL6A3	0 copies
Muscular hypertrophy (double muscling)	MSTN	0 copies
Musladin-Lueke syndrome	ADAMTSL2	0 copies
Myotonia	CLCN1	0 copies

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Musculoskeletal and connective tissue (39)

Clear

Disorder	Gene	Copies
Myotonia	CLCN1	0 copies
Myotonia	CLCN1	0 copies
Myotubular myopathy	MTM1	0 copies
Myotubular myopathy	MTM1	0 copies
Oculoskeletal dysplasia, COL9A3-related	COL9A3	0 copies
Osteogenesis imperfecta, COL1A1-related	COL1A1	0 copies
Osteogenesis imperfecta, COL1A2-related	COL1A2	0 copies
Osteogenesis imperfecta, COL1A2-related	COL1A2	0 copies
Osteogenesis imperfecta, SERPINH1-related	SERPINH1	0 copies
Skeletal dysplasia 2 (SD2)	COL11A2	0 copies
Spondylocostal dysostosis	HES7	0 copies
Ullrich congenital muscular dystrophy (UCMD)	COL6A1	0 copies

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Neurologic (45)

Clear

Disorder	Gene	Copies
Acral mutilation syndrome	GDNF	0 copies
Alexander disease	GFAP	0 copies
Bandera's neonatal ataxia (BNAt)	GRM1	0 copies
Benign familial juvenile epilepsy (BFJE)	LGI2	0 copies
Cerebellar ataxia, KCNIP4-related	KCNIP4	0 copies
Cerebellar ataxia, RAB24-related	RAB24	0 copies
Cerebellar ataxia, SEL1L-related	SEL1L	0 copies
Congenital myasthenic syndrome, CHAT-related	CHAT	0 copies
Congenital myasthenic syndrome, CHRNE-related	CHRNE	0 copies
Congenital myasthenic syndrome, CHRNE-related	CHRNE	0 copies
Congenital myasthenic syndrome, COLQ-related	COLQ	0 copies
Congenital myasthenic syndrome, COLQ-related	COLQ	0 copies
Dandy-Walker-like malformation (cerebellar hypoplasia)	VLDLR	0 copies
Degenerative myelopathy	SOD1	0 copies
Generalized myoclonic epilepsy with photosensitivity	DIRAS1	0 copies
Hypomyelination	FNIP2	0 copies
Juvenile-onset neuroaxonal dystrophy, TECPR2-related	TECPR2	0 copies
Krabbe disease	GALC	0 copies
Krabbe disease	GALC	0 copies
L-2-hydroxyglutaricacidemia	L2HGDH	0 copies
L-2-hydroxyglutaricacidemia	L2HGDH	0 copies
Laryngeal paralysis and polyneuropathy	CNTNAP1	0 copies
Leigh-like subacute necrotizing encephalopathy (SNE)	SLC19A3	0 copies
Leukoencephalomyelopathy	NAPEPLD	0 copies
Mitochondrial neurodegenerative disease with epileptic encephalopathy	PITRM1	0 copies
Multiple system degeneration	SERAC1	0 copies
Narcolepsy	HCRTR2	0 copies

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Neurologic (45)

Clear

Disorder	Gene	Copies
Neuroaxonal dystrophy, PLA2G6-related	PLA2G6	0 copies
Neuroaxonal dystrophy, VPS11-related	VPS11	0 copies
Neurodegenerative vacuolar storage disease	ATG4D	0 copies
Neurological defects, MYO5A-related	MYO5A	0 copies
neuropathy, sensory, RETREG1(FAM134B)-related	FAM134B	0 copies
Pelizaeus-Merzbacker disease (shaking pup disease)	PLP1	0 copies
Polyneuropathy, ARHGEF10-related	ARHGEF10	0 copies
Polyneuropathy, GJA9-related	GJA9	0 copies
Polyneuropathy, NDRG1-related	NDRG1	0 copies
Polyneuropathy, NDRG1-related	NDRG1	0 copies
Polyneuropathy, RAB3GAP1-related	RAB3GAP1	0 copies
Polyneuropathy, SBF2-related	SBF2	0 copies
Spinocerebellar ataxia, CAPN1-related	CAPN1	0 copies
Spinocerebellar ataxia, KCNJ10-related	KCNJ10	0 copies
Spinocerebellar ataxia, SCN8A-related	SCN8A	0 copies
Spinocerebellar ataxia, SPTBN2-related	SPTBN2	0 copies
Spongy degeneration with cerebellar ataxia (SDCA)	ATP1B2	0 copies
Spongy degeneration with cerebellar ataxia 1 (SDCA1)	KCNJ10	0 copies

Genetic Health Predispositions Tested Clear

Ophthalmologic (38)

Clear

Disorder	Gene	Copies
Achromatopsia, CNGA3-related	CNGA3	0 copies
Achromatopsia, CNGA3-related	CNGA3	0 copies
Achromatopsia, CNGB3-related	CNGB3	0 copies
Cone-rod dystrophy 1 (crd1)	PDE6B	0 copies
Cone-rod dystrophy 2 (crd2)	IQCB1	0 copies
Cone-rod dystrophy 4 (crd4)	RPGRIP1	0 copies
Congenital eye malformation	SIX6	0 copies
Congenital keratoconjunctivitis sicca and ichthyosiform dermatosis (CKCSID)	FAM83H	0 copies
Congenital stationary night blindness	LRIT3	0 copies
Early retinal degeneration (erd)	STK38L	0 copies
Goniodysgenesis and early-onset glaucoma	OLFML3	0 copies
Leber congenital amaurosis	RPE65	0 copies
Lens luxation	ADAMTS17	0 copies
Multifocal retinopathy 1	BEST1	0 copies
Multifocal retinopathy 2	BEST1	0 copies
Multifocal retinopathy 3	BEST1	0 copies
Primary open-angle glaucoma (POAG), ADAMTS10-related	ADAMTS10	0 copies
Primary open-angle glaucoma (POAG), ADAMTS10-related	ADAMTS10	0 copies
Primary open-angle glaucoma (POAG), primary lens luxation (PLL), or both	ADAMTS17	0 copies
Progressive retinal atrophy, BBS4-related	BBS4	0 copies
Progressive retinal atrophy, CCDC66-related	CCDC66	0 copies
Progressive retinal atrophy, CCDC66-related	CCDC66	0 copies
Progressive retinal atrophy, CNGA1-related	CNGA1	0 copies
Progressive Retinal Atrophy, CNGB1-related	CNGB1	0 copies
Progressive Retinal Atrophy, HIVEP3-related	HIVEP3	0 copies
Progressive Retinal Atrophy, IFT122-related	IFT122	0 copies
Progressive Retinal Atrophy, NECAP1-related	NECAP1	0 copies

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Ophthalmologic (38)

Clear

Disorder	Gene	Copies
Progressive retinal atrophy, RHO-related	RHO	0 copies
Progressive Retinal Atrophy, SAG-related	SAG	0 copies
Progressive retinal atrophy, SLC4A3-related	SLC4A3	0 copies
Progressive retinal atrophy, TTC8-related	TTC8	0 copies
Progressive retinal atrophy, X-linked, type 1	RPGR	0 copies
Progressive retinal atrophy, X-linked, type 2	RPGR	0 copies
Progressive rod-cone degeneration	PRCD	0 copies
Rod-cone dysplasia 1 (rcd1), PDE6B-related	PDE6B	0 copies
Rod-cone dysplasia 3 (rcd3)	PDE6A	0 copies
Stargardt disease 1	ABCA4	0 copies
X-linked retinal dysplasia	NDP	0 copies

Gina's Breed + Health Report

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Other systems (8)

Clear

Disorder	Gene	Copies
Deafness, bilateral, and vestibular dysfunction	MYO7A	0 copies
Deafness, unilateral and vestibular dysfunction	PTPRQ	0 copies
Decreased litter size	GDF9	0 copies
Dental hypomineralization	FAM20C	0 copies
Disorder of sexual development, SRY-related	HSD17B3	0 copies
Non-syndromic hearing loss	LOXHD1	0 copies
Periodic Fever Syndrome	MTBP	0 copies
Persistent Müllerian duct syndrome	AMHR2	0 copies

Gina's Breed + Health Report

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Other Systems (1)

Clear

Disorder	Gene	Copies
Multiple drug sensitivity (MDR1)	ABCB1	0 copies

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Renal/Urinary (15)

Clear

Disorder	Gene	Copies
2,8-DHA urolithiasis	APRT	0 copies
Cystinuria, type IA	SLC3A1	0 copies
Cystinuria, type IA	SLC3A1	0 copies
Cystinuria, type IIA	SLC3A1	0 copies
Cystinuria, type IIB	SLC7A9	0 copies
Diffuse cystic renal dysplasia and hepatic fibrosis	INPP5E	0 copies
Nephritis, X-linked	COL4A5	0 copies
Nephropathy	COL4A4	0 copies
Nephropathy	COL4A4	0 copies
Polycystic kidney disease	PKD1	0 copies
Primary hyperoxaluria, type I (Oxalosis I)	AGXT	0 copies
Protein-losing nephropathy	KIRREL2	0 copies
Protein-losing nephropathy	KIRREL2	0 copies
Renal cystadenocarcinoma and nodular dermatofibrosis	FLCN	0 copies
Urolithiasis, SLC2A9-related	SLC2A9	0 copies

Gina's Breed + Health Report

Genetic Health Predispositions Tested Clear

basepaws
PET GENETICS

Respiratory (3)

Clear

Disorder	Gene	Copies
Pulmonary surfactant metabolism dysfunction	LAMP3	0 copies
Recurrent inflammatory pulmonary disease	AKNA	0 copies
Respiratory distress syndrome	ANLN	0 copies

Physical Traits

basepaws
PET GENETICS

Trait

Melanistic Mask

Result

Likely to Have

Category

Facial Pattern

Gene	Identified Copies
MC1R	2 copies

Description

Melanocortin 1 Receptor (MC1R), also known as the Extension locus, is a gene that is responsible for producing pigments that are eumelanin (dark brown/black) or pheomelanin (reddish-yellow). There are seven known variants of this gene, with variant Em being associated with the melanistic mask.

Inheritance

Autosomal Dominant

Breeds Prevalence

Leonberger, Malinois

Physical Traits

basepaws
PET GENETICS

Trait

Smaller body size

Result

Likely to Have

Category

Morphology

Gene	Identified Copies
IGF1	0 copies

Description

Insulin-like growth factor 1 (IGF1) is a gene that controls a potent growth hormone. Mutations in this gene contribute to a range of body sizes in modern dogs.

Inheritance

Complex

Physical Traits

Trait

Dilute coat

Result

Likely to Have

Category

Coat

Gene	Identified Copies
MLPH	2 copies
MLPH	0 copies
MLPH	0 copies

Description

Mutations in melanophilin (MLPH) causes dilution base coat colors, such as black and red pigments. These dilutions often lead to a gray-blue or pale silvery red color, depending on the base color.

Inheritance

Autosomal Recessive

Breeds Prevalence

American Staffordshire Terrier, Beagle, Doberman Pinscher, German Pinscher, Large Munsterlander, Miniature Pinscher, Rhodesian Ridgeback, Chow Chow, Sloughi, Thai Ridgeback, Chihuahua, Hungarian mudi, Hungarian pumi, Italian Greyhound, Pekingese, Shetland Sheepdog, Shih-Tzu, Tibetan Mastiff, Yorkshire Terrier

Physical Traits

Trait

Black coat, CBD103-related

Result

Likely to Have

Category

Coat Color

Gene	Identified Copies
CBD103	1 copy
CBD103	0 copies
CBD103	0 copies
CBD103	0 copies

Description

A mutation in Beta-defensin (CBD103) is unique to dogs and is responsible for dominant black coat color.

Inheritance

Complex

Other Physical Traits Tested

basepaws
PET GENETICS

Coat Color (11)

Not Likely to Have

Disorder	Gene	Copies
Albinism, SLC45A2-related	SLC45A2	0 copies
Albinism, SLC45A2-related	SLC45A2	0 copies
Cream coat	MC1R	0 copies
Red/Yellow coat	MC1R	0 copies
White coat	MC1R	0 copies
Yellow coat	ASIP	2 copies
Yellow coat	ASIP	0 copies
Yellow coat	ASIP	1 copy
Yellow coat	ASIP	0 copies
Yellow coat	ASIP	0 copies
Yellow coat	ASIP	0 copies

Coat Color Modifier (10)

Not Likely to Have

Disorder	Gene	Copies
Brown coat	TYRP1	0 copies
Brown coat	TYRP1	0 copies
Brown coat	TYRP1	0 copies
Brown coat	TYRP1	0 copies
Brown coat	TYRP1	0 copies
Brown coat	TYRP1	0 copies
Dilute coat	MYO5A	0 copies
Dilute red coat	MFSD12	0 copies
White-spotted coat color, KIT-related	KIT	0 copies
White-spotted coat color, KIT-related	KIT	0 copies

Other Physical Traits Tested

basepaws
PET GENETICS

Coat Pattern (7)

Not Likely to Have

Disorder	Gene	Copies
Himalayan coat	TYR	0 copies
Wolf-like (Sable) coat	ASIP	2 copies
Wolf-like (Sable) coat	ASIP	0 copies
Wolf-like (Sable) coat	ASIP	1 copy
Wolf-like (Sable) coat	ASIP	0 copies
Wolf-like (Sable) coat	ASIP	0 copies
Wolf-like (Sable) coat	ASIP	0 copies

Coat Properties (5)

Not Likely to Have

Disorder	Gene	Copies
Curly coat	KRT71	0 copies
Long-haired coat	FGF5	0 copies
Long-haired coat	FGF5	0 copies
Long-haired coat	FGF5	0 copies
Shedding	MC5R	2 copies

Facial Pattern (2)

Not Likely to Have

Disorder	Gene	Copies
Grizzle	MC1R	2 copies
Grizzle	MC1R	0 copies

Other Physical Traits Tested

basepaws
PET GENETICS

Morphology (3)

Not Likely to Have

Disorder	Gene	Copies
Intermediate body size	IGF1	0 copies
Larger body size	IGF1	0 copies
Muzzle Length	BMP3	0 copies

Tail (2)

Not Likely to Have

Disorder	Gene	Copies
Bobtail	TBXT	0 copies
Screw tail	DVL2	0 copies