



DNA Test Report Test Date: November 13th, 2025 embk.me/elyfhaussegovia

BREED MIX

German Shepherd Dog: 100.0%

GENETIC STATS

Wolfiness: 0 % LOW

Predicted adult weight: 73 lbs

Life stage: Mature adult

Based on your dog's date of birth provided.

TEST DETAILS

Kit number: EM-50791703

Swab number: 31250360108202

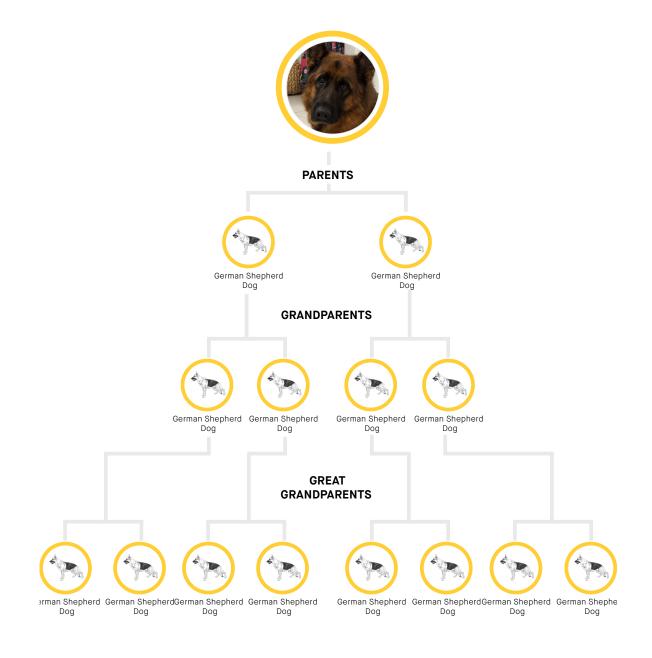






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FAMILY TREE











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GERMAN SHEPHERD DOG

The German Shepherd dog is the second most popular dog breed in the United States, and the fourth most popular in the United Kingdom (where it is known as the Alsatian). This breed was standardized in Germany at the end of the 19th century from local dogs used for herding and livestock guarding. Their confidence, courageousness and keen sense of smell coupled with their notable intelligence make them highly suited to police work, military roles, and search and rescue. German Shepherds require regular physical and mental exercise and have a heavy shedding coat that comes in both short and long varieties. They were first recognized by the AKC in 1908 and later became fashionable as soldiers returning from WWI spoke highly of the German dogs and Hollywood popularized the breed with stars like Strongheart and Rin Tin Tin.

Fun Fact

Despite being sometimes called the "Alsatian wolf dog", German Shepherds are not true wolf dogs— they are 100% dog. Nevertheless, German shepherds were crossed with wolves in the past to form the Czechoslovakian and Saarloos wolfdog breeds. German Shepherds, along with other breeds and sled dogs, were also used in the creation of the Chinook breed.







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MATERNAL LINE



Through Shakira Di Casa Caputi's mitochondrial DNA we can trace her mother's ancestry back to where dogs and people first became friends. This map helps you visualize the routes that her ancestors took to your home. Their story is described below the map.

HAPLOGROUP: A1d

This female lineage can be traced back about 15,000 years to some of the original Central Asian wolves that were domesticated into modern dogs. The early females that represent this lineage were likely taken into Eurasia, where they spread rapidly. As a result, many modern breed and village dogs from the Americas, Africa, through Asia and down into Oceania belong to this group! This widespread lineage is not limited to a select few breeds, but the majority of Rottweilers, Afghan Hounds and Wirehaired Pointing Griffons belong to it. It is also the most common female lineage among Papillons, Samoyeds and Jack Russell Terriers. Considering its occurrence in breeds as diverse as Afghan Hounds and Samoyeds, some of this is likely ancient variation. But because of its presence in many modern European breeds, much of its diversity likely can be attributed to much more recent breeding.

HAPLOTYPE: A247/A522

Part of the A1d haplogroup, the A247/A522 haplotype occurs most frequently in Pomeranians, Dachshunds, and Australian Shepherds.







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TRAITS: BASE COAT COLOR

TRAIT RESULT

Dark or Light Fur | E (Extension) Locus | Gene: Melanocortin Receptor 1 (MC1R) | Genetic Result: EmEm

This gene helps determine whether a dog can produce dark (black or brown) hairs or lighter yellow or red hairs. Any result except for **ee** means that the dog can produce dark hairs. An **ee** result means that the dog does not produce dark hairs and will have lighter yellow or red hairs all over its entire body.

The overall MC1R genetic result is influenced by more subloci than those presented in this section.

Additional MC1R subloci results can be found under the **Coat Color Modifiers** > **Facial Fur Pattern** section below.

Can have dark fur

Did You Know? If a dog has an **ee** result, then the fur's actual shade can range from a deep copper to white - the exact color cannot be predicted solely from this result and will depend on other genetic factors, including the red pigment intensity test.

Dark brown pigment | Cocoa | Gene: HPS3 | Genetic Result: NN

Dogs with the **coco** genotype will produce dark brown pigment instead of black in both their hair and skin. Dogs with the **Nco** genotype will produce black pigment, but can pass the **co** variant on to their puppies. Dogs that have the **coco** genotype as well as the **bb** genotype at the B locus are generally a lighter brown than dogs that have the **Bb** or **BB** genotypes at the B locus.

No impact on fur and skin color

Did You Know? The **co** variant and the dark brown "cocoa" coat color have only been documented in French Bulldogs. Dogs with the cocoa coat color are sometimes born with light brown coats that darken as they reach maturity.

Red Pigment Intensity | I (Intensity) Loci | Genetic Result: Intermediate Red Pigmentation

Intensity refers to the concentration of red pigment in the coat. Dogs with more densely concentrated (intense) pigment will be a deeper red, while dogs with less concentrated (dilute) pigment will be tan, yellow, cream, or white. Five locations in the dog genome explain approximately 70% of red pigmentation intensity variation across all dogs. Because the locations we test may not directly cause differences in red pigmentation intensity, we consider this to be a linkage test.

Any light fur likely yellow or tan

Did You Know? One of the genes that influences pigment intensity in dogs, TYR, is also responsible for intensity variation in domestic mice, cats, cattle, rabbits, and Ilamas. In dogs and humans, more genes are involved.







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TRAITS: BASE COAT COLOR (CONTINUED)

TRAIT RESULT

Brown or Black Pigment | B (Brown) Locus | Gene: Tyrosinase Related Protein 1 (TYRP1) | Genetic Result: BB

This gene helps determine whether a dog produces brown or black pigments. Dogs with a **bb** result produce brown pigment instead of black in both their hair and skin, while dogs with a **Bb** or **BB** result produce black pigment. Dogs that have **ee** at the E (Extension) Locus and **bb** at this B (Brown) Locus are likely to have red or cream coats and brown noses, eye rims, and footpads, which is sometimes referred to as "Dudley Nose" in Labrador Retrievers.

Black or gray fur and skin

Did You Know? "Liver" or "chocolate" is the preferred color term for brown in most breeds; in the Doberman Pinscher it is referred to as "red".

Color Dilution | D (Dilute) Locus | Gene: Melanophilin (MLPH) | Genetic Result: DD

This gene helps determine whether a dog has lighter "diluted" pigment. A dog with a **Dd** or **DD** result will not be dilute. A dog with a **dd** result will have all their black or brown pigment lightened ("diluted") to gray or light brown, and may lighten red pigment to cream. This affects their fur, skin, and sometimes eye color. The D locus result that we report is determined by three different genetic variants that can work together to cause diluted pigmentation. These are the common **d** allele, also known as "**d1**", and the less common alleles known as "**d2**" and "**d3**". Dogs with two **d** alleles, regardless of which variant, are typically dilute.

Dark (non-dilute) fur and skin

Did You Know? There are many breed-specific names for these dilute colors, such as "blue", "charcoal", "fawn", "silver", and "Isabella". Dilute dogs, especially in certain breeds, have a higher incidence of Color Dilution Alopecia which causes hair loss in some patches.







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TRAITS: COAT COLOR MODIFIERS

TRAIT RESULT

Hidden Patterning | K (Dominant Black) Locus | Gene: Canine Beta-Defensin 103 (CBD103) | Genetic Result: kyky

This gene helps determine whether the dog has a black coat. Dogs with a $k^y k^y$ result will show a coat color pattern based on the result they have at the A (Agouti) Locus. A $K^B K^B$ or $K^B k^y$ result means the dog is dominant black, which overrides the fur pattern that would otherwise be determined by the A (Agouti) Locus. These dogs will usually have solid black or brown coats, or if they have **ee** at the E (Extension) Locus then red/cream coats, regardless of their result at the A (Agouti) Locus. Dogs who test as $K^B k^y$ may be brindle rather than black or brown.

More likely to have patterned fur

Did You Know? Even if a dog is "dominant black" several other genes could still impact the dog's fur and cause other patterns, such as white spotting.

Body Pattern | A (Agouti) Locus | Gene: Agouti Signalling Protein (ASIP) | Genetic Result: atat

This gene is responsible for causing different coat patterns. It only affects the fur of dogs that do not have **ee** at the E (Extension) Locus and do have **k**^y**k**^y at the K (Dominant Black) Locus. It controls switching between black and red pigment in hair cells, which means that it can cause a dog to have hairs that have sections of black and sections of red/cream, or hairs with different colors on different parts of the dog's body. Sable or Fawn dogs have a mostly or entirely red coat with some interspersed black hairs. Agouti or Wolf Sable dogs have red hairs with black tips, mostly on their head and back. Black and tan dogs are mostly black or brown with lighter patches on their cheeks, eyebrows, chest, and legs. Recessive black dogs have solid-colored black or brown coats.

Black/Brown and tan coat color pattern

Did You Know? The ASIP gene causes interesting coat patterns in many other species of animals as well as dogs.







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TRAITS: COAT COLOR MODIFIERS (CONTINUED)

TRAIT RESULT

Facial Fur Pattern | E (Extension) Locus | Gene: Melanocortin Receptor 1 (MC1R) | Genetic Result: EmEm

This gene determines whether a dog can have dark hair and can give it a black "mask" or "widow's peak," unless the dog has overriding coat color genetic factors. Dogs with one or two copies of E^m in their result may have a mask, which is dark facial fur as seen in the German Shepherd Dog and Pug. Dogs with no E^m in their result but one or two copies of the E^g , E^a , or E^h variants can instead have a "widow's peak", which is dark forehead fur.

Did You Know?

The "widow's peak" is seen in the Afghan Hound and Borzoi, and is called either "grizzle" or "domino."

In the absence of E^m , dogs with the E^g variant can have a "widow's peak" phenotype. In the absence of both E^m and E variants, dogs with the E^a or E^h variants can express the "widow's peak" phenotype. Additionally, a dog with any combination of two of the E^g , E^a , or E^h variants (example: E^gE^a) is also expected to express the grizzle phenotype.

Can have black masking (dark facial fur)

Saddle Tan | Gene: RALY | Genetic Result: NN

The "Saddle Tan" pattern causes the black hairs to recede into a "saddle" shape on the back, leaving a tan face, legs, and belly, as a dog ages. The Saddle Tan pattern is characteristic of breeds like the Corgi, Beagle, and German Shepherd. Dogs that have the II genotype at this locus are more likely to be mostly black with tan points on the eyebrows, muzzle, and legs as commonly seen in the Doberman Pinscher and the Rottweiler. This gene modifies the A Locus $\mathbf{a^t}$ allele, so dogs that do not express $\mathbf{a^t}$ are not influenced by this gene.

Likely saddle tan patterned

Did You Know? The Saddle Tan pattern is characteristic of breeds like the Corgi, Beagle, and German Shepherd.







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TRAITS: COAT COLOR MODIFIERS (CONTINUED)

TRAIT RESULT

White Spotting | S (White Spotting) Locus | Gene: MITF | Genetic Result: SS

This gene is responsible for most of the white spotting observed in dogs. Dogs with a result of **spsp** will have a nearly white coat or large patches of white in their coat. Dogs with a result of **Ssp** will have more limited white spotting that is breed-dependent. A result of **SS** means that a dog likely has no white or minimal white in their coat. The S Locus does not explain all white spotting patterns in dogs and other causes are currently being researched. Some dogs may have small amounts of white on the paws, chest, face, or tail regardless of their result at this gene.

Likely to have little to no white in coat

Did You Know? Any dog can have white spotting regardless of coat color. The colored sections of the coat will reflect the dog's other genetic coat color results.

Roan | R (Roan) Locus | Gene: USH2A | Genetic Result: Rr

This gene, along with the S Locus, regulates whether a dog will have roaning. Dogs with at least one copy of **R** will likely have roaning on otherwise uniformly unpigmented white areas created by the S Locus. Roan may not be visible if white spotting is limited to small areas, such as the paws, chest, face, or tail. The extent of roaning varies from uniform roaning to non-uniform roaning, and patchy, non-uniform roaning may look similar to ticking. Roan does not appear in white areas created by other genes, such as a combination of the E Locus and I Locus (for example, Samoyeds). The roan pattern can appear with or without ticking.

Likely no impact on coat pattern

Did You Know? Roan, tick, and Dalmatians' spots become visible a few weeks after birth. The R Locus is probably involved in the development of Dalmatians' spots.

Merle | M (Merle) Locus | Gene: PMEL | Genetic Result: mm

This gene is responsible for mottled or patchy coat color in some dogs. Dogs with an **M*m** result are likely to appear merle or could be "non-expressing" merle, meaning that the merle pattern is very subtle or not at all evident in their coat. Dogs with an **M*M*** result are likely to have merle or double merle coat patterning. Dogs with an **mm** result are unlikely to have a merle coat pattern.

Unlikely to have merle pattern

Did You Know? Merle coat patterning is common to several dog breeds including the Australian Shepherd, Catahoula Leopard Dog, and Shetland Sheepdog.







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TRAITS: COAT COLOR MODIFIERS (CONTINUED)

TRAIT RESULT

Harlequin | Gene: PSMB | Genetic Result: hh

This gene, along with the M Locus, determines whether a dog will have harlequin patterning. This pattern is recognized in Great Danes and causes dogs to have a white coat with patches of darker pigment. A dog with an **Hh** result will be harlequin if they are also **M*m** or **M*M*** at the M Locus and are not **ee** at the E locus. Dogs with a result of **hh** will not be harlequin.

No impact on coat pattern

Did You Know? While many harlequin dogs are white with black patches, some dogs have grey, sable, or brindle patches of color, depending on their genotypes at other coat color genes.

Panda White Spotting | Gene: KIT | Genetic Result: NN

Panda White Spotting originated in a line of German Shepherd Dogs and causes a mostly symmetrical white spotting of the head and/or body. This is a dominant variant of the KIT gene, which has a role in pigmentation.

Dogs with one copy of the I allele will exhibit this white spotting. Dogs with two copies of the I allele have never been observed, as two copies of the variant is suspected to be lethal to the developing embryo. Dogs with the **NN** result will not exhibit white spotting due to this variant.

Not expected to display Panda pattern

Did You Know? A de novo mutation (a genetic mutation not inherited from the parents) occurred in a female German Shepherd Dog named Lewcinka's Franka von Phenom. She was born in 2000, and all Panda Shepherds can trace their bloodline back to her.





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TRAITS: OTHER COAT TRAITS

TRAIT RESULT

Furnishings | Gene: RSP02 | Genetic Result: II

This gene is responsible for "furnishings", which is another name for the mustache, beard, and eyebrows that are characteristic of breeds like the Schnauzer, Scottish Terrier, and Wire Haired Dachshund. A dog with an **FF** or **FI** result is likely to have furnishings. A dog with an **II** result will not have furnishings. We measure this result using a linkage test.

Likely unfurnished (no mustache, beard, and/or eyebrows)

Did You Know? In breeds that are expected to have furnishings, dogs without furnishings are the exception - this is sometimes called an "improper coat".

Coat Length | Gene: FGF5 | Genetic Result: ShLh

This gene affects hair length in many species, including cats, dogs, mice, and humans. In dogs, an **Lh** allele confers a long, silky hair coat across many breeds, including Yorkshire Terriers, Cocker Spaniels, and Golden Retrievers. An **ShSh** or **ShLh** result is likely to mean a shorter coat, like in the Boxer or the American Staffordshire Terrier. The coat length determined by FGF5, as reported by us, is influenced by four genetic variants that work together to promote long hair.

The most common of these is the **Lh1** variant (G/T, CanFam3.1, chr32, g.4509367) and the less common ones are **Lh2** (C/T, CanFam3.1, chr32, g.4528639), **Lh3** (16bp deletion, CanFam3.1, chr32, g.4528616), and **Lh4** (GG insertion, CanFam3.1, chr32, g.4528621). The FGF5_Lh1 variant is found across many dog breeds. The less common variants, FGF5_Lh2 have been found in the Akita, Samoyed, and Siberian Husky, FGF5_Lh3 have been found in the Eurasier, and FGF5_Lh4 have been found in the Afghan Hound, Eurasier, and French Bulldog.

Likely short or midlength coat

The **Lh** alleles have a recessive mode of inheritance, meaning that two copies of the **Lh** alleles are required to have long hair. The presence of two Lh alleles at any of these FGF5 loci is expected to result in long hair. One copy each of **Lh1** and **Lh2** have been found in Samoyeds, one copy each of **Lh1** and **Lh3** have been found in Eurasiers and one copy each of **Lh1** and **Lh4** have been found in Afghan Hounds and Eurasiers.

Did You Know? In certain breeds, such as Pembroke Welsh Corgi and French Bulldog, the long coat is described as "fluffy."







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TRAITS: OTHER COAT TRAITS (CONTINUED)

TRAIT RESULT

Shedding | Gene: MC5R | Genetic Result: CC

This gene affects how much a dog sheds. Dogs with furnishings or wire-haired coats tend to be low shedders regardless of their result for this gene. In other dogs, a **CC** or **CT** result indicates heavy or seasonal shedding, like many Labradors and German Shepherd Dogs. Dogs with a **TT** result tend to be lighter shedders, like Boxers, Shih Tzus and Chihuahuas.

Likely heavy/seasonal shedding

Coat Texture | Gene: KRT71 | Genetic Result: CC

For dogs with long fur, dogs with a **TT** or **CT** result will likely have a wavy or curly coat like the coat of Poodles and Bichon Frises. Dogs with a **CC** result will likely have a straight coat—unless the dog has a "Likely Furnished" result for the Furnishings trait, since this can also make the coat more curly.

Likely straight coat

Did You Know? Dogs with short coats may have straight coats, whatever result they have for this gene.

Hairlessness (Xolo type) | Gene: FOXI3 | Genetic Result: NN

This gene can cause hairlessness over most of the body as well as changes in tooth shape and number. This particular gene occurs in Peruvian Inca Orchid, Xoloitzcuintli (Mexican Hairless), and Chinese Crested; other hairless breeds are due to different genes. Dogs with the **NDup** result are likely to be hairless while dogs with the **NN** result are likely to have a normal coat. We measure this result using a linkage test.

Very unlikely to be hairless

Did You Know? The **DupDup** result has never been observed, suggesting that dogs with that genotype cannot survive to birth.

Hairlessness (Terrier type) | Gene: SGK3 | Genetic Result: NN

This gene is responsible for Hairlessness in the American Hairless Terrier. Dogs with the **DD** result are likely to be hairless. Dogs with the **ND** genotype will have a normal coat, but can pass the **D** variant on to their offspring.

Very unlikely to be hairless

Oculocutaneous Albinism Type 2 | Gene: SLC45A2 | Genetic Result: NN

This gene causes oculocutaneous albinism (OCA), also known as Doberman Z Factor Albinism. Dogs with a







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TRAITS: OTHER BODY FEATURES

TRAIT RESULT

Muzzle Length | Gene: BMP3 | Genetic Result: CC

This gene affects muzzle length. A dog with a **AC** or **CC** result is likely to have a medium-length muzzle like a Staffordshire Terrier or Labrador, or a long muzzle like a Whippet or Collie. A dog with a **AA** result is likely to have a short muzzle, like an English Bulldog, Pug, or Pekingese.

Did You Know? At least five different genes affect snout length in dogs, with BMP3 being the only one with a known causal mutation. For example, the muzzle length of some breeds, including the long-snouted Scottish Terrier or the short-snouted Japanese Chin, appear to be caused by other genes. This means your dog may have a long or short snout due to other genetic factors. Embark is working to figure out what these might be.

Likely medium or long muzzle

Tail Length | Gene: T | Genetic Result: CC

This is one of the genes that can cause a short bobtail. Most dogs have a **CC** result and a long tail. Dogs with a **CG** result are likely to have a bobtail, which is an unusually short or absent tail. This can be seen in many "natural bobtail" breeds including the Pembroke Welsh Corgi, the Australian Shepherd, and the Brittany Spaniel. Dogs with **GG** genotypes have not been observed, suggesting that dogs with such a result do not survive to birth.

Likely normal-length tail

Did You Know? While certain lineages of Boston Terrier, English Bulldog, Rottweiler, Miniature Schnauzer, Cavalier King Charles Spaniel, and Parson Russell Terrier, and Dobermans are born with a natural bobtail, it is not always caused by this gene. This suggests that other unknown genetic effects can also lead to a natural bobtail.

Hind Dew Claws | Gene: LMBR1 | Genetic Result: CC

This is one of the genes that can cause hind dew claws, which are extra, nonfunctional digits located midway between a dog's paw and hock. Dogs with a **CT** or **TT** result have about a 50% chance of having hind dewclaws. Hind dew claws can also be caused by other, still unknown, genes. Embark is working to figure those out.

Unlikely to have hind dew claws

Did You Know? Hind dew claws are commonly found in certain breeds such as the Saint Bernard.







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TRAITS: OTHER BODY FEATURES (CONTINUED)

TRAIT RESULT

Back Muscling & Bulk (Large Breed) | Gene: ACSL4 | Genetic Result: CC

This gene can cause heavy muscling along the back and trunk in characteristically "bulky" large-breed dogs including the Saint Bernard, Bernese Mountain Dog, Greater Swiss Mountain Dog, and Rottweiler. A dog with the **TT** result is likely to have heavy muscling. Leaner-shaped large breed dogs like the Great Dane, Irish Wolfhound, and Scottish Deerhound generally have a **CC** result. The **TC** result also indicates likely normal muscling.

Likely normal muscling

Did You Know? This gene does not seem to affect muscling in small or even mid-sized dog breeds with lots of back muscling, including the American Staffordshire Terrier, Boston Terrier, and the English Bulldog.

Eye Color | Gene: ALX4 | Genetic Result: NN

This gene is associated with blue eyes in Arctic breeds like Siberian Husky as well as tri-colored (non-merle) Australian Shepherds. Dogs with a **DupDup** or **NDup** result are more likely to have blue eyes, although some dogs may have only one blue eye or may not have blue eyes at all; nevertheless, they can still pass blue eyes to their offspring. Dogs with a **NN** result may have blue eyes due to other factors, such as merle or white spotting. We measure this result using a linkage test.

Less likely to have blue eyes

Did You Know? Embark researchers discovered this gene by studying data from dogs like yours. Who knows what we will be able to discover next? Answer the questions on our research surveys to contribute to future discoveries!

Chondrodysplasia (Leg Length) | Gene: Chr. 18 FGF4 Retrogene | Genetic Result: NN

This variant is associated with a type of disproportionate dwarfism known as chondrodysplasia (CDPA). CDPA is a breed-defining characteristic of many breeds exhibiting a "short-legged, long-bodied" appearance, such as Corgis, Dachshunds, Basset Hounds, and others. Dogs with the II result display the largest reduction in leg length. Dogs with the NI genotype will have an intermediate leg length, while dogs with the NN result will not exhibit leg shortening due to this variant.

Likely to have normal leg length

Did You Know? A similar genetic variant called the chondrodystrophy (CDDY) variant also plays an important role in shortening the leg length of many breeds. Dog breeds with the shortest legs, like the Corgi, Dachshund, and Basset Hound generally have one or two copies of the CDDY and CDPA variants. CDDY (but not CDPA) is also associated with an increased risk of Type I Intervertebral Disc Disease (IVDD). You can see the CDDY result in the health test results under "Intervertebral Disc Disease Type I".







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TRAITS: BODY SIZE

TRAIT	RESULT
Body Size 1 Gene: IGF1 Genetic Result: NN This is one of several genes that influence the size of a dog. A result of II for this gene is associated with smaller body size. A result of NN is associated with larger body size.	
Body Size 2 Gene: IGFR1 Genetic Result: GG This is one of several genes that influence the size of a dog. A result of AA for this gene is associated with smaller body size. A result of GG is associated with larger body size.	
Body Size 3 Gene: STC2 Genetic Result: TA This is one of several genes that influence the size of a dog. A result of AA for this gene is associated with smaller body size. A result of TT is associated with larger body size.	te
Body Size 4 Gene: GHR - E191K Genetic Result: GG This is one of several genes that influence the size of a dog. A result of AA for this gene is associated with smaller body size. A result of GG is associated with larger body size.	
Body Size 5 Gene: GHR - P177L Genetic Result: CC This is one of several genes that influence the size of a dog. A result of TT for this gene is associated with smaller body size. A result of CC is associated with larger body size.	





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TRAITS: PERFORMANCE

TRAIT RESULT

Altitude Adaptation | Gene: EPAS1 | Genetic Result: GG

This gene causes dogs to be especially tolerant of low oxygen environments, such as those found at high elevations. Dogs with a AA or GA result will be less susceptible to "altitude sickness."

Normal altitude tolerance

Did You Know? This gene was originally identified in breeds from high altitude areas such as the Tibetan Mastiff.

Appetite | Gene: POMC | Genetic Result: NN

This gene influences eating behavior. An **ND** or **DD** result would predict higher food motivation compared to **NN** result, increasing the likelihood to eat excessively, have higher body fat percentage, and be more prone to obesity. Read more about the genetics of POMC, and learn how you can contribute to research, in our blog post (https://embarkvet.com/resources/blog/pomc-dogs/). We measure this result using a linkage test.

Normal food motivation

Did You Know? POMC is actually short for "proopiomelanocortin," and is a large protein that is broken up into several smaller proteins that have biological activity. The smaller proteins generated from POMC control, among other things, distribution of pigment to the hair and skin cells, appetite, and energy expenditure.





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HEALTH REPORT

How to interpret Shakira Di Casa Caputi's genetic health results:

If Shakira Di Casa Caputi inherited any of the variants that we tested, they will be listed at the top of the Health Report section, along with a description of how to interpret this result. We also include all of the variants that we tested Shakira Di Casa Caputi for that we did not detect the risk variant for.

A genetic test is not a diagnosis

This genetic test does not diagnose a disease. Please talk to your vet about your dog's genetic results, or if you think that your pet may have a health condition or disease.

Summary

Shakira Di Casa Caputi is not at increased risk for the genetic health conditions that Embark tests.



Breed-relevant (12)

Other (261)





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BREED-RELEVANT RESULTS

Research studies indicate that these results are more relevant to dogs like Shakira Di Casa Caputi, and may influence her chances of developing certain health conditions.

Anhidrotic Ectodermal Dysplasia (EDA Intron 8)	Clear
Oanine Leukocyte Adhesion Deficiency Type III, CLAD III (FERMT3, German Shepherd Variant)	Clear
Oay Blindness (CNGA3 Exon 7, German Shepherd Variant)	Clear
O Degenerative Myelopathy, DM (SOD1A)	Clear
Hemophilia A (F8 Exon 11, German Shepherd Variant 1)	Clear
Hemophilia A (F8 Exon 1, German Shepherd Variant 2)	Clear
O Ichthyosis (ASPRV1 Exon 2, German Shepherd Variant)	Clear
MDR1 Drug Sensitivity (ABCB1)	Clear
Mucopolysaccharidosis Type VII, Sly Syndrome, MPS VII (GUSB Exon 3, German Shepherd Variant)	Clear
Platelet Factor X Receptor Deficiency, Scott Syndrome (TMEM16F)	Clear
Renal Cystadenocarcinoma and Nodular Dermatofibrosis (FLCN Exon 7)	Clear
Urate Kidney & Bladder Stones (SLC2A9)	Clear







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OTHER RESULTS

Research has not yet linked these conditions to dogs with similar breeds to Shakira Di Casa Caputi. Review any increased risk or notable results to understand her potential risk and recommendations.

2-DHA Kidney & Bladder Stones (APRT)	Clear
Acral Mutilation Syndrome (GDNF-AS, Spaniel and Pointer Variant)	Clear
Alaskan Husky Encephalopathy (SLC19A3)	Clear
Alaskan Malamute Polyneuropathy, AMPN (NDRG1 SNP)	Clear
Alexander Disease (GFAP)	Clear
ALT Activity (GPT)	Clear
Autosomal Dominant Progressive Retinal Atrophy (RHO)	Clear
Bald Thigh Syndrome (IGFBP5)	Clear
Bernard-Soulier Syndrome, BSS (GP9, Cocker Spaniel Variant)	Clear
Bully Whippet Syndrome (MSTN)	Clear
Canine Elliptocytosis (SPTB Exon 30)	Clear
Canine Fucosidosis (FUCA1)	Clear
Canine Leukocyte Adhesion Deficiency Type I, CLAD I (ITGB2, Setter Variant)	Clear
Canine Multifocal Retinopathy, cmr1 (BEST1 Exon 2)	Clear
Canine Multifocal Retinopathy, cmr2 (BEST1 Exon 5, Coton de Tulear Variant)	Clear
Canine Multifocal Retinopathy, cmr3 (BEST1 Exon 10 Deletion, Finnish and Swedish Lapphund, Lapponian Herder Variant)	Clear
Canine Multiple System Degeneration (SERAC1 Exon 4, Chinese Crested Variant)	Clear
Oanine Multiple System Degeneration (SERAC1 Exon 15, Kerry Blue Terrier Variant)	Clear





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Cardiomyopathy and Juvenile Mortality (YARS2)	Clear
Centronuclear Myopathy, CNM (PTPLA)	Clear
Cerebellar Hypoplasia (VLDLR, Eurasier Variant)	Clear
Chondrodysplasia (ITGA10, Norwegian Elkhound and Karelian Bear Dog Variant)	Clear
Cleft Lip and/or Cleft Palate (ADAMTS20, Nova Scotia Duck Tolling Retriever Variant)	Clear
Cleft Palate, CP1 (DLX6 intron 2, Nova Scotia Duck Tolling Retriever Variant)	Clear
Cobalamin Malabsorption (CUBN Exon 8, Beagle Variant)	Clear
Cobalamin Malabsorption (CUBN Exon 53, Border Collie Variant)	Clear
Collie Eye Anomaly (NHEJ1)	Clear
Omplement 3 Deficiency, C3 Deficiency (C3)	Clear
Congenital Cornification Disorder (NSDHL, Chihuahua Variant)	Clear
Congenital Dyserythropoietic Anemia and Polymyopathy (EHPB1L1, Labrador Retriever Variant)	Clear
Congenital Hypothyroidism (TPO, Rat, Toy, Hairless Terrier Variant)	Clear
Congenital Hypothyroidism (TPO, Tenterfield Terrier Variant)	Clear
Congenital Hypothyroidism with Goiter (TPO Intron 13, French Bulldog Variant)	Clear
Ongenital Hypothyroidism with Goiter (SLC5A5, Shih Tzu Variant)	Clear
Congenital Macrothrombocytopenia (TUBB1 Exon 1, Cairn and Norfolk Terrier Variant)	Clear
Ongenital Muscular Dystrophy (LAMA2, Italian Greyhound)	Clear





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Congenital Myasthenic Syndrome, CMS (COLQ, Labrador Retriever Variant)	Clear
Congenital Myasthenic Syndrome, CMS (COLQ, Golden Retriever Variant)	Clear
Congenital Myasthenic Syndrome, CMS (CHAT, Old Danish Pointing Dog Variant)	Clear
Ongenital Myasthenic Syndrome, CMS (CHRNE, Jack Russell Terrier Variant)	Clear
Congenital Stationary Night Blindness (LRIT3, Beagle Variant)	Clear
Ongenital Stationary Night Blindness (RPE65, Briard Variant)	Clear
Opper Toxicosis (Accumulating) (ATP7B)	Clear
Opper Toxicosis (Attenuating) (ATP7A, Labrador Retriever)	Clear
Opper Toxicosis (Attenuating) (RETN, Labrador Retriever)	Clear
⊘ Craniomandibular Osteopathy, CMO (SLC37A2)	Clear
Craniomandibular Osteopathy, CMO (SLC37A2 Intron 16, Basset Hound Variant)	Clear
Cystinuria Type I-A (SLC3A1, Newfoundland Variant)	Clear
Cystinuria Type II-A (SLC3A1, Australian Cattle Dog Variant)	Clear
Cystinuria Type II-B (SLC7A9, Miniature Pinscher Variant)	Clear
Oarier Disease (ATP2A2, Irish Terrier Variant)	Clear
Oay Blindness (CNGB3 Deletion, Alaskan Malamute Variant)	Clear
Oay Blindness (CNGA3 Exon 7, Labrador Retriever Variant)	Clear
Day Blindness (CNGB3 Exon 6, German Shorthaired Pointer Variant)	Clear







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O Deafness and Vestibular Syndrome of Dobermans, DVDob, DINGS (MYO7A)	Clear
Demyelinating Polyneuropathy (SBF2/MTRM13)	Clear
Oental-Skeletal-Retinal Anomaly (MIA3, Cane Corso Variant)	Clear
Oiffuse Cystic Renal Dysplasia and Hepatic Fibrosis (INPP5E Intron 9, Norwich Terrier Variant)	Clear
Oilated Cardiomyopathy, DCM (RBM20, Schnauzer Variant)	Clear
Oilated Cardiomyopathy, DCM1 (PDK4, Doberman Pinscher Variant 1)	Clear
Dilated Cardiomyopathy, DCM2 (TTN, Doberman Pinscher Variant 2)	Clear
Oisproportionate Dwarfism (PRKG2, Dogo Argentino Variant)	Clear
Ory Eye Curly Coat Syndrome (FAM83H Exon 5)	Clear
Opstrophic Epidermolysis Bullosa (COL7A1, Central Asian Shepherd Dog Variant)	Clear
Opstrophic Epidermolysis Bullosa (COL7A1, Golden Retriever Variant)	Clear
Early Bilateral Deafness (LOXHD1 Exon 38, Rottweiler Variant)	Clear
Early Onset Adult Deafness, EOAD (EPS8L2 Deletion, Rhodesian Ridgeback Variant)	Clear
Early Onset Cerebellar Ataxia (SEL1L, Finnish Hound Variant)	Clear
Ehlers Danlos (ADAMTS2, Doberman Pinscher Variant)	Clear
Ehlers-Danlos Syndrome (EDS) (COL5A1, Labrador Retriever Variant)	Clear
Enamel Hypoplasia (ENAM Deletion, Italian Greyhound Variant)	Clear
Enamel Hypoplasia (ENAM SNP, Parson Russell Terrier Variant)	Clear







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Episodic Falling Syndrome (BCAN)	Clear
Exercise-Induced Collapse, EIC (DNM1)	Clear
Factor VII Deficiency (F7 Exon 5)	Clear
Factor XI Deficiency (F11 Exon 7, Kerry Blue Terrier Variant)	Clear
Familial Nephropathy (COL4A4 Exon 3, Cocker Spaniel Variant)	Clear
Familial Nephropathy (COL4A4 Exon 30, English Springer Spaniel Variant)	Clear
Fanconi Syndrome (FAN1, Basenji Variant)	Clear
Fetal-Onset Neonatal Neuroaxonal Dystrophy (MFN2, Giant Schnauzer Variant)	Clear
⊘ Glanzmann's Thrombasthenia Type I (ITGA2B Exon 13, Great Pyrenees Variant)	Clear
	Clear
Globoid Cell Leukodystrophy, Krabbe disease (GALC Exon 5, Terrier Variant)	Clear
Glycogen Storage Disease Type IA, Von Gierke Disease, GSD IA (G6PC1, German Pinscher Variant)	Clear
Glycogen Storage Disease Type IA, Von Gierke Disease, GSD IA (G6PC, Maltese Variant)	Clear
Glycogen Storage Disease Type IIIA, GSD IIIA (AGL, Curly Coated Retriever Variant)	Clear
Glycogen storage disease Type VII, Phosphofructokinase Deficiency, PFK Deficiency (PFKM, Whippet and English Springer Spaniel Variant)	Clear
Glycogen storage disease Type VII, Phosphofructokinase Deficiency, PFK Deficiency (PFKM, Wachtelhund Variant)	Clear
	Clear
	Clear





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	Clear
	Clear
	Clear
	Clear
	Clear
Oniodysgenesis and Glaucoma, Pectinate Ligament Dysplasia, PLD (OLFM3)	Clear
Hemophilia A (F8 Exon 10, Boxer Variant)	Clear
Hemophilia B (F9 Exon 7, Terrier Variant)	Clear
Hemophilia B (F9 Exon 7, Rhodesian Ridgeback Variant)	Clear
Hereditary Ataxia (PNPLA8, Australian Shepherd Variant)	Clear
Hereditary Ataxia, Cerebellar Degeneration (RAB24, Old English Sheepdog and Gordon Setter Variant)	Clear
Hereditary Cataracts (HSF4 Exon 9, Australian Shepherd Variant)	Clear
Hereditary Cataracts (FYCO1, Wirehaired Pointing Griffon Variant)	Clear
Hereditary Cerebellar Ataxia (SELENOP, Belgian Shepherd Variant)	Clear
Hereditary Footpad Hyperkeratosis (FAM83G, Terrier and Kromfohrlander Variant)	Clear
Hereditary Footpad Hyperkeratosis (DSG1, Rottweiler Variant)	Clear
Hereditary Nasal Parakeratosis (SUV39H2 Intron 4, Greyhound Variant)	Clear
Hereditary Nasal Parakeratosis, HNPK (SUV39H2)	Clear







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Hereditary Vitamin D-Resistant Rickets (VDR)	Clear
Hypocatalasia, Acatalasemia (CAT)	Clear
Hypomyelination and Tremors (FNIP2, Weimaraner Variant)	Clear
Hypophosphatasia (ALPL Exon 9, Karelian Bear Dog Variant)	Clear
O Ichthyosis (NIPAL4, American Bulldog Variant)	Clear
O Ichthyosis (SLC27A4, Great Dane Variant)	Clear
O Ichthyosis, Epidermolytic Hyperkeratosis (KRT10, Terrier Variant)	Clear
O Ichthyosis, ICH1 (PNPLA1, Golden Retriever Variant)	Clear
O Ichthyosis, ICH2 (ABHD5, Golden Retriever Variant)	Clear
✓ Inflammatory Myopathy (SLC25A12)	Clear
✓ Inherited Myopathy of Great Danes (BIN1)	Clear
Inherited Selected Cobalamin Malabsorption with Proteinuria (CUBN, Komondor Variant)	Clear
✓ Intervertebral Disc Disease (Type I) (FGF4 retrogene - CFA12)	Clear
Intestinal Lipid Malabsorption (ACSL5, Australian Kelpie)	Clear
Junctional Epidermolysis Bullosa (LAMA3 Exon 66, Australian Cattle Dog Variant)	Clear
Junctional Epidermolysis Bullosa (LAMB3 Exon 11, Australian Shepherd Variant)	Clear
	Clear
Juvenile Laryngeal Paralysis and Polyneuropathy (RAB3GAP1, Rottweiler Variant)	Clear





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	Clear
	Clear
	Clear
Laryngeal Paralysis (RAPGEF6, Miniature Bull Terrier Variant)	Clear
 Laryngeal Paralysis and Polyneuropathy (CNTNAP1, Leonberger, Saint Bernard, and Labrador Retriever variant) 	Clear
Late Onset Spinocerebellar Ataxia (CAPN1)	Clear
Late-Onset Neuronal Ceroid Lipofuscinosis, NCL 12 (ATP13A2, Australian Cattle Dog Variant)	Clear
	Clear
	Clear
	Clear
 Leukodystrophy (TSEN54 Exon 5, Standard Schnauzer Variant) 	Clear
	Clear
	Clear
	Clear
O Long QT Syndrome (KCNQ1)	Clear
Uundehund Syndrome (LEPREL1)	Clear
Macular Corneal Dystrophy, MCD (CHST6)	Clear
Malignant Hyperthermia (RYR1)	Clear





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May-Hegglin Anomaly (MYH9)	Clear
Medium-Chain Acyl-CoA Dehydrogenase Deficiency, MCADD (ACADM, Cavalier King Charles Spaniel Variant)	Clear
Methemoglobinemia (CYB5R3, Pit Bull Terrier Variant)	Clear
Methemoglobinemia (CYB5R3)	Clear
Microphthalmia (RBP4 Exon 2, Soft Coated Wheaten Terrier Variant)	Clear
Mucopolysaccharidosis IIIB, Sanfilippo Syndrome Type B, MPS IIIB (NAGLU, Schipperke Variant)	Clear
Mucopolysaccharidosis Type IIIA, Sanfilippo Syndrome Type A, MPS IIIA (SGSH Exon 6, Dachshund Variant)	Clear
Mucopolysaccharidosis Type IIIA, Sanfilippo Syndrome Type A, MPS IIIA (SGSH Exon 6, New Zealand Huntaway Variant)	Clear
Mucopolysaccharidosis Type VI, Maroteaux-Lamy Syndrome, MPS VI (ARSB Exon 5, Miniature Pinscher Variant)	Clear
Mucopolysaccharidosis Type VII, Sly Syndrome, MPS VII (GUSB Exon 5, Terrier Brasileiro Variant)	Clear
Muscular Dystrophy (DMD, Cavalier King Charles Spaniel Variant 1)	Clear
Muscular Dystrophy (DMD, Golden Retriever Variant)	Clear
Muscular Dystrophy-Dystroglycanopathy (LARGE1, Labrador Retriever Variant)	Clear
Musladin-Lueke Syndrome, MLS (ADAMTSL2)	Clear
Myasthenia Gravis-Like Syndrome (CHRNE, Heideterrier Variant)	Clear
Myotonia Congenita (CLCN1 Exon 23, Australian Cattle Dog Variant)	Clear
Myotonia Congenita (CLCN1 Exon 19, Labrador Retriever Variant)	Clear
Myotonia Congenita (CLCN1 Exon 7, Miniature Schnauzer Variant)	Clear





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Narcolepsy (HCRTR2 Exon 1, Dachshund Variant)	Clear
Narcolepsy (HCRTR2 Intron 4, Doberman Pinscher Variant)	Clear
Narcolepsy (HCRTR2 Intron 6, Labrador Retriever Variant)	Clear
Nemaline Myopathy (NEB, American Bulldog Variant)	Clear
Neonatal Cerebellar Cortical Degeneration (SPTBN2, Beagle Variant)	Clear
Neonatal Encephalopathy with Seizures, NEWS (ATF2)	Clear
Neonatal Interstitial Lung Disease (LAMP3)	Clear
Neuroaxonal Dystrophy, NAD (VPS11, Rottweiler Variant)	Clear
Neuroaxonal Dystrophy, NAD (TECPR2, Spanish Water Dog Variant)	Clear
Neuronal Ceroid Lipofuscinosis 1, NCL 1 (PPT1 Exon 8, Dachshund Variant 1)	Clear
Neuronal Ceroid Lipofuscinosis 10, NCL 10 (CTSD Exon 5, American Bulldog Variant)	Clear
Neuronal Ceroid Lipofuscinosis 2, NCL 2 (TPP1 Exon 4, Dachshund Variant 2)	Clear
Neuronal Ceroid Lipofuscinosis 5, NCL 5 (CLN5 Exon 4 SNP, Border Collie Variant)	Clear
Neuronal Ceroid Lipofuscinosis 5, NCL 5 (CLN5 Exon 4 Deletion, Golden Retriever Variant)	Clear
Neuronal Ceroid Lipofuscinosis 6, NCL 6 (CLN6 Exon 7, Australian Shepherd Variant)	Clear
Neuronal Ceroid Lipofuscinosis 7, NCL 7 (MFSD8, Chihuahua and Chinese Crested Variant)	Clear
Neuronal Ceroid Lipofuscinosis 8, NCL 8 (CLN8, Australian Shepherd Variant)	Clear
Neuronal Ceroid Lipofuscinosis 8, NCL 8 (CLN8 Exon 2, English Setter Variant)	Clear







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Neuronal Ceroid Lipofuscinosis 8, NCL 8 (CLN8 Insertion, Saluki Variant)	Clear
Neuronal Ceroid Lipofuscinosis, Cerebellar Ataxia, NCL4A (ARSG Exon 2, American Staffordshire Terrier Variant)	Clear
Oculocutaneous Albinism, OCA (SLC45A2 Exon 6, Bullmastiff Variant)	Clear
Oculocutaneous Albinism, OCA (SLC45A2, Small Breed Variant)	Clear
Oculoskeletal Dysplasia 2 (COL9A2, Samoyed Variant)	Clear
Osteochondrodysplasia (SLC13A1, Poodle Variant)	Clear
Osteogenesis Imperfecta (COL1A2, Beagle Variant)	Clear
Osteogenesis Imperfecta (SERPINH1, Dachshund Variant)	Clear
Osteogenesis Imperfecta (COL1A1, Golden Retriever Variant)	Clear
P2Y12 Receptor Platelet Disorder (P2Y12)	Clear
Pachyonychia Congenita (KRT16, Dogue de Bordeaux Variant)	Clear
Paroxysmal Dyskinesia, PxD (PIGN)	Clear
Persistent Mullerian Duct Syndrome, PMDS (AMHR2)	Clear
Pituitary Dwarfism (POU1F1 Intron 4, Karelian Bear Dog Variant)	Clear
Polycystic Kidney Disease, PKD (PKD1)	Clear
Pompe's Disease (GAA, Finnish and Swedish Lapphund, Lapponian Herder Variant)	Clear
Prekallikrein Deficiency (KLKB1 Exon 8)	Clear
Primary Ciliary Dyskinesia, PCD (NME5, Alaskan Malamute Variant)	Clear





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Primary Ciliary Dyskinesia, PCD (STK36, Australian Shepherd Variant)	Clear
Primary Ciliary Dyskinesia, PCD (CCDC39 Exon 3, Old English Sheepdog Variant)	Clear
Primary Hyperoxaluria (AGXT)	Clear
Primary Lens Luxation (ADAMTS17)	Clear
Primary Open Angle Glaucoma (ADAMTS17 Exon 11, Basset Fauve de Bretagne Variant)	Clear
Primary Open Angle Glaucoma (ADAMTS10 Exon 17, Beagle Variant)	Clear
Primary Open Angle Glaucoma (ADAMTS10 Exon 9, Norwegian Elkhound Variant)	Clear
Primary Open Angle Glaucoma and Primary Lens Luxation (ADAMTS17 Exon 2, Chinese Shar-Pei Variant)	Clear
Progressive Retinal Atrophy (SAG)	Clear
Progressive Retinal Atrophy (IFT122 Exon 26, Lapponian Herder Variant)	Clear
Progressive Retinal Atrophy 5, PRA5 (NECAP1 Exon 6, Giant Schnauzer Variant)	Clear
Progressive Retinal Attophty 3, FRA3 (NEGAP) Exon 6, Glant Schhauzer Variant)	Gleai
Progressive Retinal Atrophy, Bardet-Biedl Syndrome (BBS2 Exon 11, Shetland Sheepdog Variant)	Clear
Progressive Retinal Atrophy, Bardet-Biedl Syndrome (BBS2 Exon 11, Shetland Sheepdog Variant)	Clear
 Progressive Retinal Atrophy, Bardet-Biedl Syndrome (BBS2 Exon 11, Shetland Sheepdog Variant) Progressive Retinal Atrophy, CNGA (CNGA1 Exon 9) 	Clear Clear
 Progressive Retinal Atrophy, Bardet-Biedl Syndrome (BBS2 Exon 11, Shetland Sheepdog Variant) Progressive Retinal Atrophy, CNGA (CNGA1 Exon 9) Progressive Retinal Atrophy, crd1 (PDE6B, American Staffordshire Terrier Variant) 	Clear Clear Clear
 Progressive Retinal Atrophy, Bardet-Biedl Syndrome (BBS2 Exon 11, Shetland Sheepdog Variant) Progressive Retinal Atrophy, CNGA (CNGA1 Exon 9) Progressive Retinal Atrophy, crd1 (PDE6B, American Staffordshire Terrier Variant) Progressive Retinal Atrophy, crd4/cord1 (RPGRIP1) 	Clear Clear Clear





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Progressive Retinal Atrophy, rcd1 (PDE6B Exon 21, Irish Setter Variant)	Clear
Progressive Retinal Atrophy, rcd3 (PDE6A)	Clear
Proportionate Dwarfism (GH1 Exon 5, Chihuahua Variant)	Clear
Protein Losing Nephropathy, PLN (NPHS1)	Clear
Pyruvate Dehydrogenase Deficiency (PDP1, Spaniel Variant)	Clear
Pyruvate Kinase Deficiency (PKLR Exon 5, Basenji Variant)	Clear
Pyruvate Kinase Deficiency (PKLR Exon 7, Beagle Variant)	Clear
Pyruvate Kinase Deficiency (PKLR Exon 10, Terrier Variant)	Clear
Pyruvate Kinase Deficiency (PKLR Exon 7, Labrador Retriever Variant)	Clear
Pyruvate Kinase Deficiency (PKLR Exon 7, Pug Variant)	Clear
Raine Syndrome (FAM20C)	Clear
Recurrent Inflammatory Pulmonary Disease, RIPD (AKNA, Rough Collie Variant)	Clear
Retina Dysplasia and/or Optic Nerve Hypoplasia (SIX6 Exon 1, Golden Retriever Variant)	Clear
Sensory Neuropathy (FAM134B, Border Collie Variant)	Clear
Severe Combined Immunodeficiency, SCID (PRKDC, Terrier Variant)	Clear
Severe Combined Immunodeficiency, SCID (RAG1, Wetterhoun Variant)	Clear
Shaking Puppy Syndrome (PLP1, English Springer Spaniel Variant)	Clear
Shar-Pei Autoinflammatory Disease, SPAID, Shar-Pei Fever (MTBP)	Clear







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Skeletal Dysplasia 2, SD2 (COL11A2, Labrador Retriever Variant)	Clear
Skin Fragility Syndrome (PKP1, Chesapeake Bay Retriever Variant)	Clear
Spinocerebellar Ataxia (SCN8A, Alpine Dachsbracke Variant)	Clear
Spinocerebellar Ataxia with Myokymia and/or Seizures (KCNJ10)	Clear
Spongy Degeneration with Cerebellar Ataxia 1 (KCNJ10)	Clear
Spongy Degeneration with Cerebellar Ataxia 2 (ATP1B2)	Clear
Stargardt Disease (ABCA4 Exon 28, Labrador Retriever Variant)	Clear
Succinic Semialdehyde Dehydrogenase Deficiency (ALDH5A1 Exon 7, Saluki Variant)	Clear
⊘ Thrombopathia (RASGRP1 Exon 5, American Eskimo Dog Variant)	Clear
Thrombopathia (RASGRP1 Exon 5, Basset Hound Variant)	Clear
Thrombopathia (RASGRP1 Exon 8, Landseer Variant)	Clear
Trapped Neutrophil Syndrome, TNS (VPS13B)	Clear
Ullrich-like Congenital Muscular Dystrophy (COL6A3 Exon 10, Labrador Retriever Variant)	Clear
Ullrich-like Congenital Muscular Dystrophy (COL6A1 Exon 3, Landseer Variant)	Clear
Unilateral Deafness and Vestibular Syndrome (PTPRQ Exon 39, Doberman Pinscher)	Clear
	Clear
✓ Von Willebrand Disease Type II, Type II vWD (VWF, Pointer Variant)	Clear
✓ Von Willebrand Disease Type III, Type III vWD (VWF Exon 4, Terrier Variant)	Clear





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✓ Von Willebrand Disease Type III, Type III vWD (VWF Intron 16, Nederlandse Kooikerhondje Variant)	Clear
✓ Von Willebrand Disease Type III, Type III vWD (VWF Exon 7, Shetland Sheepdog Variant)	Clear
X-Linked Hereditary Nephropathy, XLHN (COL4A5 Exon 35, Samoyed Variant 2)	Clear
X-Linked Myotubular Myopathy (MTM1, Labrador Retriever Variant)	Clear
	Clear
X-linked Severe Combined Immunodeficiency, X-SCID (IL2RG Exon 1, Basset Hound Variant)	Clear
X-linked Severe Combined Immunodeficiency, X-SCID (IL2RG, Corgi Variant)	Clear
Xanthine Urolithiasis (XDH, Mixed Breed Variant)	Clear
β-Mannosidosis (MANBA Exon 16, Mixed-Breed Variant)	Clear
Mast Cell Tumor	No result







39%

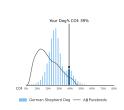
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INBREEDING AND DIVERSITY

CATEGORY RESULT

Inbreeding | Gene: n/a | Genetic Result: 39%

Inbreeding is a measure of how closely related this dog's parents were. The higher the number, the more closely related the parents. In general, greater inbreeding is associated with increased incidence of genetically inherited conditions.

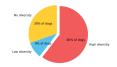


Immune Response 1 | Gene: DRB1 | Genetic Result: High Diversity

Diversity in the Major Histocompatibility Complex (MHC) region of the genome has been found in some studies to be associated with the incidence of certain autoimmune diseases. Dogs that have less diversity in the MHC region—i.e. the Dog Leukocyte Antigen (DLA) inherited from the mother is similar to the DLA inherited from the father—are considered less immunologically diverse. A High Diversity result means the dog has two highly dissimilar haplotypes. A Low Diversity result means the dog has two similar but not identical haplotypes. A No Diversity result means the dog has inherited identical haplotypes from both parents. Some studies have shown associations between certain DRB1 haplotypes and autoimmune diseases such as Cushing's disease, but these findings have yet to be scientifically validated.

High Diversity

How common is this amount of diversity in purebreds:



Immune Response 2 | Gene: DQA1 and DQB1 | Genetic Result: High Diversity

Diversity in the Major Histocompatibility Complex (MHC) region of the genome has been found in some studies to be associated with the incidence of certain autoimmune diseases. Dogs that have less diversity in the MHC region—i.e. the Dog Leukocyte Antigen (DLA) inherited from the mother is similar to the DLA inherited from the father—are considered less immunologically diverse. A High Diversity result means the dog has two highly dissimilar haplotypes. A Low Diversity result means the dog has two similar but not identical haplotypes. A No Diversity result means the dog has inherited identical haplotypes from both parents. A number of studies have shown correlations of DQA-DQB1 haplotypes and certain autoimmune diseases; however, these have not yet been scientifically validated.

High Diversity

How common is this amount of diversity in purebreds:

