

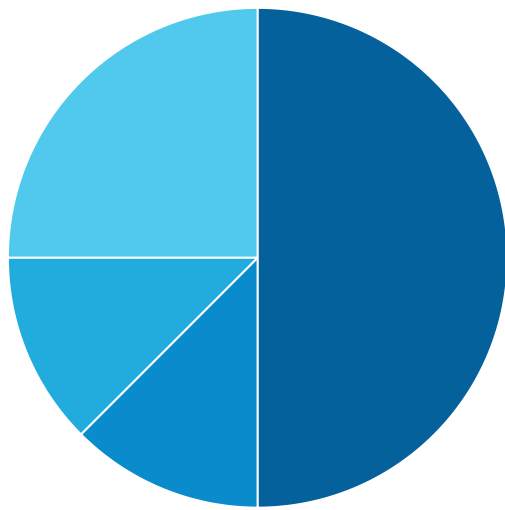
DISCOVER ALL

ABOUT SULLY

The results are in! Let's take a look at what the DNA told us about Sully's ancestry...

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SULLY'S BREED BY PERCENTAGE



- 50% English Setter
- 12.5% Collie
- 12.5% German Shepherd Dog
- 25% Breed Group(s)
 - Wild Canids
 - Sporting
 - Middle Eastern and African
 - Herding

Exciting news, the results are in! Here's what makes Sully so unique. Using the data generated from Sully's DNA, our sophisticated computer algorithm performed over 17 million calculations! What you see here is Sully's ancestry by percentage.

ENGLISH SETTER

THEY WERE FIRST BRED TO HELP FIND GAME ON THE MOORS.

- Friendly, energetic, intelligent, and gentle dogs.
- Usually good with children.
- English Setters seem to have a sensitive nature, and respond best to reward-based training using treats or favorite toys.
- English Setters are active and enjoy dog sports such as hunting, tracking, field trials, agility, retrieving, rally and competitive obedience.

▶ Height

23 - 27 in

▶ Weight (show)

55 - 66 lb

▶ Weight (pet)

49 - 77 lb



DID YOU KNOW?

The English Setter is part of the setter group and generally considered to be the oldest of them. How old is up for debate, but many believe the 14th century is about right. They were first bred to help find game on the moors, where they would remain perfectly still in sitting positions until the hunter arrived. From the 1500s, they were used to retrieve birds too. From 1825 through 1860, a man named Edward Laverack developed the breed into the standard all English Setters are judged by today. Energetic, eager and people-oriented, we judge them to be one of the most rewarding pets you can have.

COLLIE

THESE SUPER INTELLIGENT DOGS ARE ORIGINALLY FROM SCOTLAND.

- Intelligent, obedient, active, and watchful dogs.
- Collies are eager to learn especially with reward-based training,
- Collies seem to enjoy dog sports such as agility, flyball, Frisbee, tracking, rally and competitive obedience.
- Although they are often good with children and are usually friendly, some Collies can be wary or reserved with strangers.

▶ Height

20 - 24 in

▶ Weight (show)

45 - 75 lb

▶ Weight (pet)

44 - 79 lb



DID YOU KNOW?

These super intelligent dogs are originally from Scotland, where they were bred for centuries to be shepherds and guard dogs. The Collie is so smart they have been used for many other purposes too, including water rescue and being guide dogs. Many famous faces have owned one of these wonderful pets, including Queen Victoria, J.P. Morgan and Presidents Coolidge and Hoover. The Collie's reputation for bravery and loyalty was probably best immortalized by the release of the 1943 film, 'Lassie Come Home' - as well as the long-running TV series that followed. Fortunately, we don't need to be trapped inside a burning barn or down a well to know these dogs always have our best interests at heart.

GERMAN SHEPHERD DOG

INITIALLY BRED FOR HERDING, STRENGTH, INTELLIGENCE AND TEMPERAMENT.

- Personalities can vary from calm and watchful/observant to energetic.
- Enjoy participating in dog sports such as agility, tracking, flyball, and competitive obedience.
- Eager to learn and respond well to reward-based training.
- The German Shepherd Dog was originally bred for various purposes including the guarding of people and/or property. Individual members of this breed will benefit from firm and dedicated training to temper this guarding tendency, and thus help to maintain safety as a household companion.

▶ Height

22 - 26 in

▶ Weight (show)

48 - 89 lb

▶ Weight (pet)

48 - 97 lb



DID YOU KNOW?

The German Shepherd has a really impressive résumé. Over the years, they've been guard dogs, guide dogs, search and rescue dogs, and much more. Though initially bred for herding, their strength, intelligence and temperament have made them invaluable in all kinds of roles. They were famously used as German police and military animals during both World Wars. During World War I, allied soldiers took notice of their skills and brought the breed back home - but it was really after the end of the Second World War that they became popular worldwide. Today, there're just as likely to be home dogs as they are military dogs. Either way, they'll always rank highly in our estimation.

BREED GROUPS SULLY IS MOST LIKELY RELATED TO

We tested Sully's ancestry for specific pure breeds, going back three generations (or to the great-grandparents). Beyond this, today's technology can only identify down to the genetic "group" level (sporting, toy, guard, etc.). We know the breeds found in these groups and that Sully may share genetic similarities with many of them. We've arranged these in order, with the most likely starting at the top. The breeds displayed are examples of breeds in each specific group. The full list for each can be found on the breeds we analyzed, click on the link below.

WILD CANIDS GROUP

The breeds in this group are, as the name would imply, still considered wild and undomesticated. They have not specifically been bred, or developed for specific types of work or service with people.

SPORTING GROUP

The sporting group breeds are incredibly diverse in personality and appearance, but can be characterized as very sturdy. They were developed to work closely with people and in general have a very responsive nature and high intelligence.

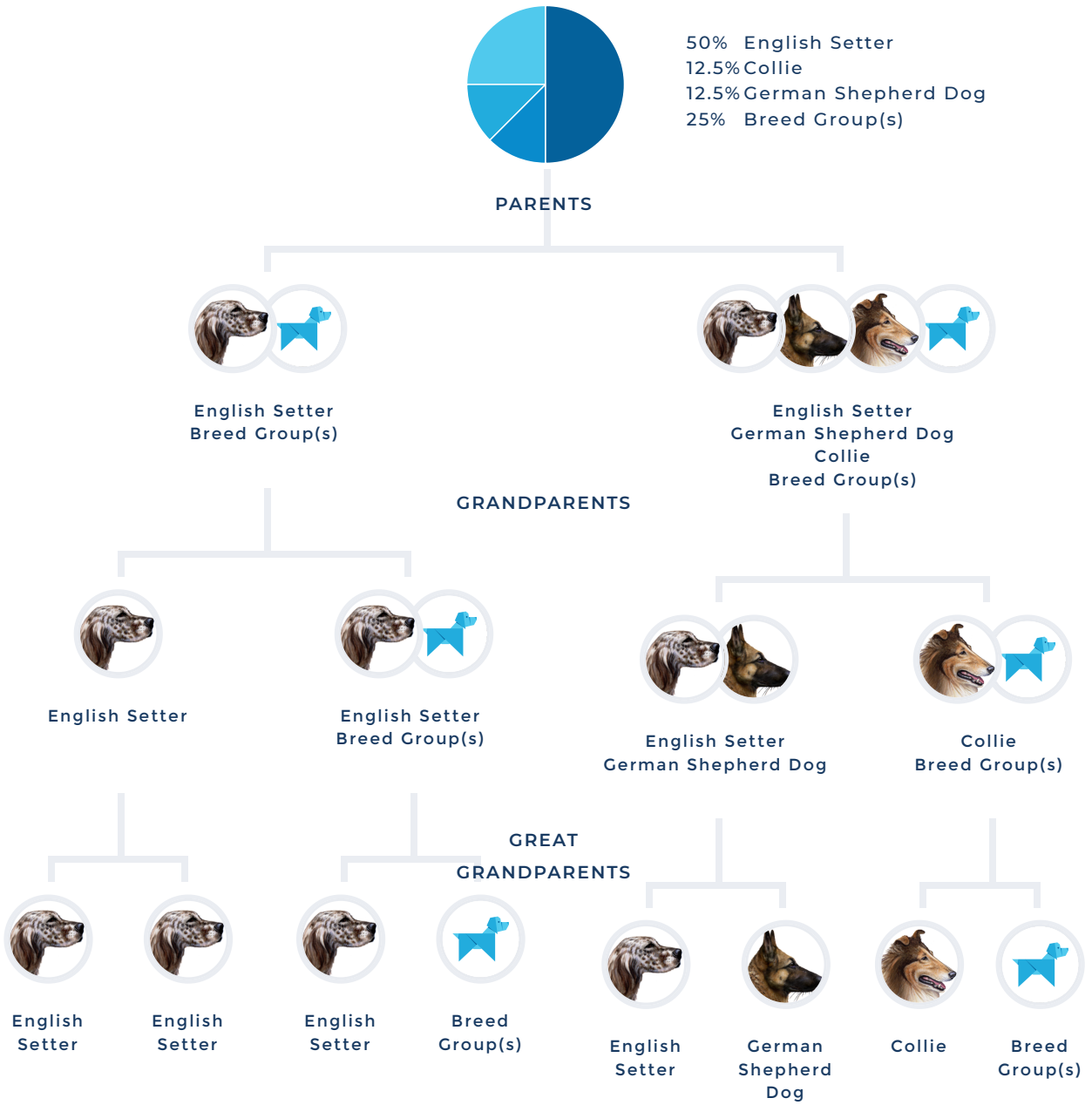
MIDDLE EASTERN AND AFRICAN GROUP

While this ancient group shares many of the characteristics of the Hound Group, their origins, as the name would suggest, are concentrated in Africa and the Middle East unlike the hound group that has no true geographic center.

HERDING GROUP

The herding group is a diverse category. These highly intelligent breeds were developed to guard and control the movement of livestock.

SULLY'S FAMILY TREE



SULLY'S HEALTH RESULTS

SAMPLE ID: T204717

We have tested Sully's DNA for the following important genetic health conditions. The results can be seen below. For more detailed information on each of these diseases, please log into your account and review your comprehensive health results.

MULTIDRUG SENSITIVITY (MDR1)



CLEAR

Sully has no copies of the MDR1 mutation and should not be affected by the disorder due to this genetic cause.

EXERCISE-INDUCED COLLAPSE (EIC)



CLEAR

Sully has no copies of the EIC mutation and should not be affected by the disorder due to this genetic cause.

SULLY'S TRAITS

SAMPLE ID: T204717

Furnishings

Sully does not carry any copies of the gene for 'furnishings' (which would give them a fuzzy beard and eyebrows). This means they probably have smooth, short facial hair. Did you know you can often get 'furnished' and 'unfurnished' dogs within the same breed?

Coat Color Subtypes

Genotype: at/at m/m h/h S/sp

Sully carries one copy of the gene for white spotting so might have a fair bit of white in their coat. (Did you know white is not a color but a lack of pigment which acts to cover up a dog's natural base color?)

Coat Color Main Possibilities

Genotype: at/at E m/e ky/ky wt/wt

Sully probably has a dark-colored, saddle-shaped pattern on their back, which is common in breeds like the German Shepherd and Beagle. They'll likely also have a dark facial 'mask'. Did you know some dogs with this trait are born 'black-and-tan' but that the dark hairs fade until only the saddle pattern remains?

Leg Length

Genotype: DD

Sully's legs should be relatively long in length, based on this marker (though there can be other genes that affect leg length). Did you know different dogs can have different leg lengths even if they are the same breed?

Tail Length

Genotype: CC

Sully likely was born with a long tail - although the exact length can vary from dog to dog. Long tails are sometimes known as 'coffee table clearers'. (If you've ever seen a long-tailed dog get excited near one, you'll know exactly why.)

Base Pigment Color

Genotype: B/bs

Sully carries the gene for the 'expression' of black pigment. This means that even though their overall coat color may not be black, they are still able to make black pigment. They will also likely have black around their eyes, a black nose, and may even have black pads on their feet.

Ear Carriage

Genotype: CT

A lot of factors can decide the shape of a dog's ear. But as far as we can tell, Sully probably has 'base erect' ears. This means the base of the ear stands up, while the tip flops over. Did you know a dog that has one parent with floppy ears and one parent with upright ears can have this kind of ear? It's also common in breeds like the American Staffordshire Terrier and Russell Terrier.

Coat Length and Type

Genotype: TT CC

Sully's coat is probably on the long side. The exact length of a dog's coat is down to several factors so it can vary. Did you know long hair is actually a recessive trait and results from inheriting two 'broken' copies of the gene that tells hairs to stop growing and shed?

IDEAL WEIGHT

SAMPLE ID: T204717

Based on our findings, we've calculated that Sully's ideal, adult weight should be:

50 lbs - 82 lbs

We've factored everything we know about Sully in predicting a healthy, adult weight. However environmental factors such as the nutrition of Sully's mom during pregnancy and nursing, Sully's nutrition during critical growth months, illness/parasites/ticks/fleas, and exercise levels can affect the actual weight of Sully.

CALCULATING WEIGHT

Our weight-predictive algorithm uses a combination of the following to calculate Sully's ideal, adult weight:

- The published weight ranges of more than 200 purebred dogs.
- The observed weights of purebred dogs, each with an ideal Body Condition Score, from the Banfield® Pet Hospital database.
- Breeds the WISDOM PANEL™ test analysis has identified that reflect a dog's true heritage and genetic complexity.
- A genetic algorithm based on mixed-breed data that calculates the contribution of each set of chromosomal genetic markers.

ENVIRONMENTAL EFFECTS ON WEIGHT

A dog's early life is very important in determining how they will grow and develop. They can fail to reach their ideal weight for a number of reasons, including the diet of their mother during pregnancy and nursing (as well as their own diet as puppies). Illness and disease can play a part too, as can having parasites like roundworms or fleas and ticks. For dogs who are adopted after they are fully-grown, it may be harder to find the historical background on these factors.

Maintaining a healthy weight is a key factor in Sully having a long and healthy life.

WISDOMTM PANEL



STATEMENT OF AUTHENTICATION

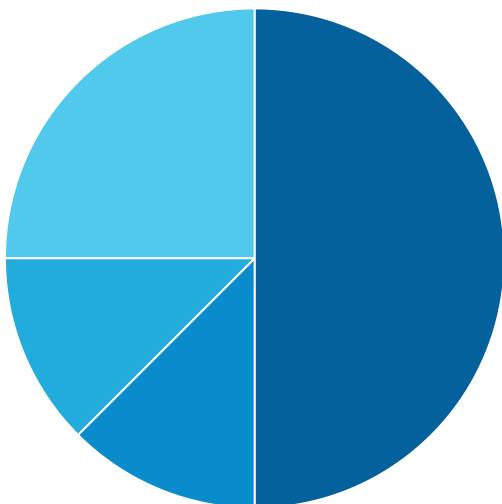
Owner's Name: Rod Allrich

Dog's Name: Sully

Sample Id: T204717

Date: November 10, 2019

This certifies the authenticity of Sully's canine genetic background as determined, following the careful analysis of more than 1800 genetic markers, by the WISDOM PANELTM Canine DNA Test. The purebred breed signature matches included in the analysis are those that were detected in the last three generations of Sully's ancestry using the Wisdom Health proprietary breed detection algorithm.



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