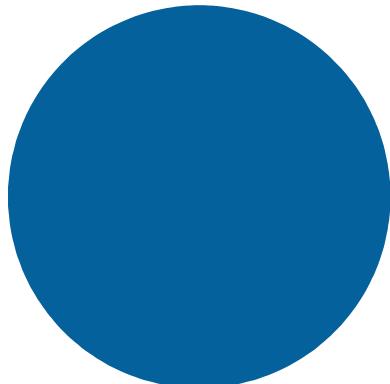


DISCOVER ALL
ABOUT GATSBY

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

© 2019 Mars, Incorporated and its Affiliates.

GATSBY'S BREED BY PERCENTAGE



● 100%
Pomeranian

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

POMERANIAN

A UNIQUE CHARACTER AND A CHEEKY APPEARANCE.

- Active, intelligent, and alert dogs.
- Eager to learn and responds well to reward-based training using treats or favorite toys.
- Pomeranians seem to enjoy dog sports such as agility, musical canine freestyle, rally and competitive obedience.
- They tend to bark. They can be reserved around strangers and may require careful socialization to prevent or reduce defensive aggressive tendencies.

► Height

7 - 12 in



► Weight (show)

3 - 7 lb

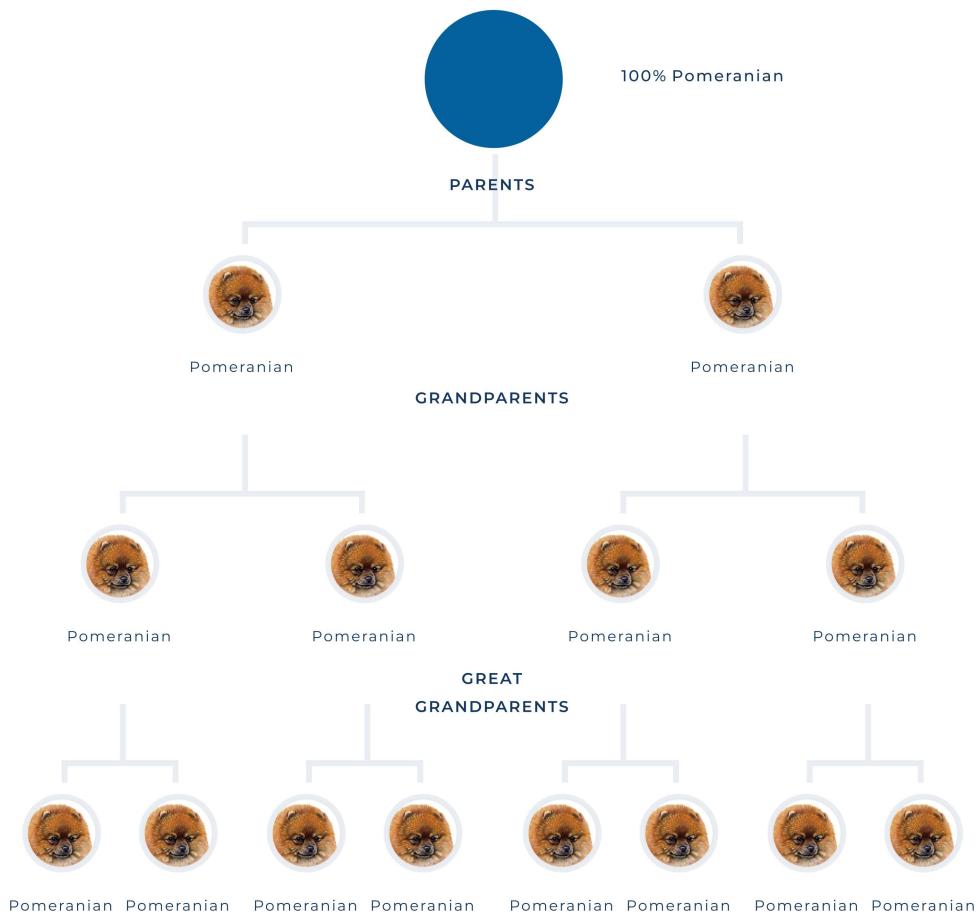
► Weight (pet)

3 - 10 lb

DID YOU KNOW?

With their unique character and cheeky appearance, these great little companions have been captivating people for over 150 years. The 'Poms' you see nowadays are toy dogs, but they didn't always look like this. Think more Golden Retriever, with a bushy tail, and you'd be closer. It was Queen Victoria who influenced the change. She was given a tiny one as a present in 1888, which launched a fashion for the 'pocket-sized' dogs that went global. And the trend continues today, as breeders maintain the quality that keeps these trustworthy little fellows as popular as ever. Pomeranians unsurprisingly are from Pomerania in north-eastern Europe, and were originally known as Zwergspitz. Zwerg means 'dwarf' and 'spitz' is the German breed of its bigger ancestor. From the freezing Prussian Baltics, bred to a dinky size, and with a royal connection, the Pomeranian has been on a worldwide journey of success. No wonder this tiny dog is a giant favorite.

GATSBY'S FAMILY TREE



GATSBY'S HEALTH RESULTS

SAMPLE ID: H012201

We have tested Gatsby's DNA for more than 150 disease-causing mutations. Below is a summary of our findings. For more detailed information on each of these diseases, please log into your account and review your comprehensive health results.



AT RISK - 0

Being "At Risk" means Gatsby may show or develop signs of one of the following genetic diseases. Please be sure to read the condition information carefully and share these results with your veterinarian.



CARRIER - 0

Carrier status is where a dog has inherited one copy of a disease-causing mutation, when two copies are usually needed for disease signs to occur. The good news is that carriers are unlikely to show disease signs, but there may be a slight increase in risk of disease for some conditions. Please be sure to read the condition information carefully and share these results with your veterinarian.



CLEAR - 152

Gatsby inherited zero copies of these disease mutations. Be sure to use our share feature to let your veterinarian know about Gatsby's results. For some of the conditions there may still be undiscovered mutations and/or environmental factors that could lead to similar disease signs. These clear results will help narrow down a future diagnosis if Gatsby ever gets sick.

GATSBY'S TRAITS

SAMPLE ID: H012201

Furnishings	Gatsby 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?
Ear Carriage Genotype: CT	A lot of factors can decide the shape of a dog's ear. But as far as we can tell, Gatsby 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 Color Subtypes Genotype: at/at M/m h/h S/sp	Gatsby carries one copy of the gene for white spotting so might have a fair bit of white in their coat, and also carries the gene for 'merle', which causes any dark pigment in the coat to become a patchy mix of grey and dark (either black or brown). (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/ky/ky I/I	Gatsby appears to be mostly dark in color (either black or brown) with tan-colored markings (above the eyes, on the cheeks, chest and lower legs). A lot of people think this means their dog is descended from a Doberman Pinscher or perhaps a Rottweiler. However, this trait is actually quite common.
Leg Length Genotype: DD	Gatsby'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?
Furnishings	Gatsby 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?
Ear Carriage Genotype: CT	A lot of factors can decide the shape of a dog's ear. But as far as we can tell, Gatsby 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 Color Subtypes Genotype: at/at M/m h/h S/sp	Gatsby carries one copy of the gene for white spotting so might have a fair bit of white in their coat, and also carries the gene for 'merle', which causes any dark pigment in the coat to become a patchy mix of grey and dark (either black or brown). (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/ky/ky I/I	Gatsby appears to be mostly dark in color (either black or brown) with tan-colored markings (above the eyes, on the cheeks, chest and lower legs). A lot of people think this means their dog is descended from a Doberman Pinscher or perhaps a Rottweiler. However, this trait is actually quite common.

GATSBY'S TRAITS CONTINUED

SAMPLE ID: H012201

Coat Color Main Possibilities Genotype: at/at E/e	Gatsby appears to be mostly dark in color (either black or brown) with tan-colored markings (above the eyes, on the cheeks, chest and lower legs). A lot of people think this means their dog is descended from a Doberman Pinscher or perhaps a Rottweiler. However, this trait is actually quite common.
Leg Length Genotype: DD	Gatsby'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	Gatsby 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/B	Gatsby 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.
Coat Length and Type Genotype: TT CC	Gatsby'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?
Tail Length Genotype: CC	Gatsby 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/B	Gatsby 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.
Coat Length and Type Genotype: TT CC	Gatsby'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: H012201

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

8 lbs - 15 lbs

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

CALCULATING WEIGHT

Our weight-predictive algorithm uses a combination of the following to calculate Gatsby'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 Gatsby having a long and healthy life.

ADDITIONAL BREED TESTS

Our family tree analysis shows that Gatsby closely resembles a single dog breed, based on the samples in the WISDOM PANEL™ database. We have included some extra tests free of charge to investigate this in more detail.

Single Breed Comparison

This analysis shows the relationship  between Gatsby and the Pomeranian samples in our database with each individual dog represented as a dot. The closer the dots on the chart the closer the genetic relationship. Gatsby's sample falls within the Pomeranian cluster showing that Gatsby's genetic profile closely resembles the other dogs from this breed in the Wisdom Panel database.

Single Breed Vs. All Breeds

Here we have compared Gatsby's data to  Pomeranian samples, and also a single representative sample from the other breeds in the WISDOM PANEL database. This is another way of showing that Gatsby's data is more like the Pomeranian than any other breed. Gatsby's sample falls within the Pomeranian cluster showing that Gatsby's genetic profile closely resembles the other dogs from this breed in the WISDOM PANEL database.

Homozygosity

Homozygosity is a measure of how many of  Gatsby's genetic markers are identical because the same version was passed down from both the mother and father. Purebred dogs tend to have a higher homozygosity score than most mixed breed dogs, and each breed within the WISDOM PANEL database has a specific range of scores. Gatsby's homozygosity score falls within the range for the Pomeranian samples found in the WISDOM PANEL database.

WISDOM™ PANEL



STATEMENT OF AUTHENTICATION

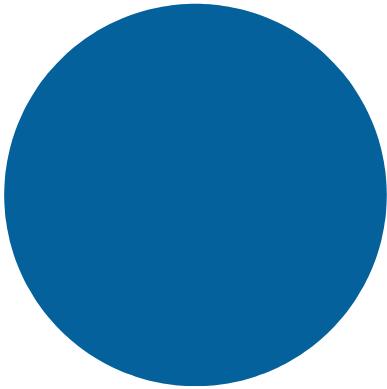
Owner's Name: **Brooke Hatzell**

Dog's Name: **Gatsby**

Sample Id: **H012201**

Date: **March 28, 2019**

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



● 100% Pomeranian