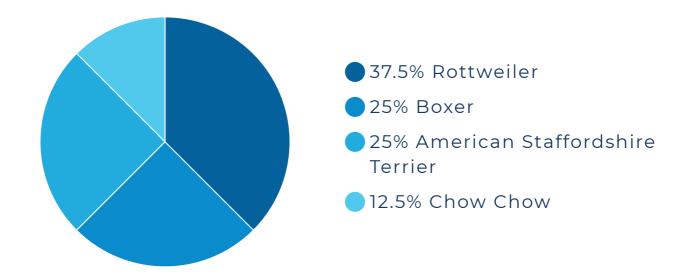
DISCOVER ALL

ABOUT SOPHIE

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

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SOPHIE'S BREED BY PERCENTAGE



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

ROTTWEILER

A FEARLESS AND DEVOTED BREED.

- Calm, intelligent, and hard working dogs.
- Rottweilers enjoy dog sports such as agility, tracking, herding, and obedience.
- Because they are sensitive, they respond best to reward-based training using treats or favorite toys.
- The Rottweiler 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.



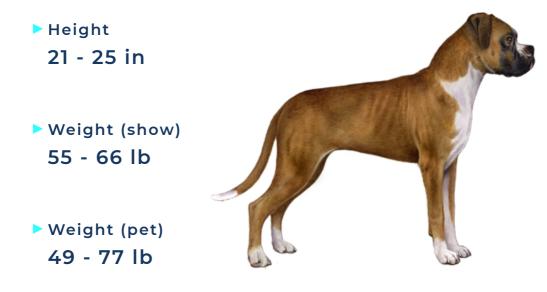
DID YOU KNOW?

During the time of the Roman Empire, Roman troops took cattle dogs on their travels to herd the livestock that would later serve as food for the soldiers. One of the towns they journeyed through was Rottweil, in Germany. This eventually became a cattle area and the descendants of the Roman cattle dogs who protected the herds came to be known as Rottweilers. By the end of the 19th century, there was only one female left in the entire town. But luckily, the first Rottweiler club was founded in 1907 and this fearless and devoted breed was saved from extinction. Today, we're glad to report these wonderful dogs have travelled far and wide beyond their original Rottweill – and can be found virtually everywhere in the world.

BOXER

PLAYFUL AND BRIGHT DOGS.

- Intelligent, hard working, and playful dogs, with a high amount of energy.
- Boxers seem to enjoy dog sports such as agility, flyball, rally and competitive obedience.
- Eager to learn and respond well to reward-based training using treats and favorite toys.
- Tendency to jump up on people, sometimes boxing with their front feet when doing so.



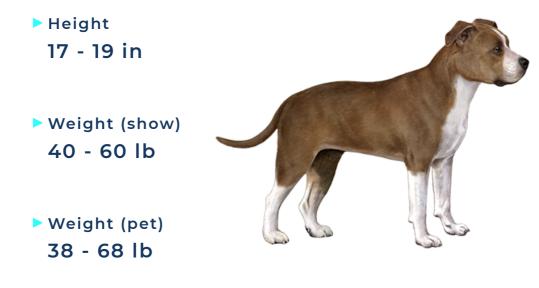
DID YOU KNOW?

In 19th century Germany, these playful and bright dogs were bred in order to hunt deer and boar. Their ancestors included the now extinct Bullenbeiszer and Barenbeiszer, which were crossed with English Bulldogs to create the Boxer we know and love today. Their popularity started to increase rapidly in the 1860s when the German Boxer Klub was founded. The American Kennel Club recognized them as a breed in 1904. These guys get their name from an old hunting habit, where they would form a 'boxing' pose standing on their hind legs. They've also been used in many circus acts because of their ability to perform and learn tricks. Today, we're still amazed by them – and their ability to be such great pets.

AMERICAN STAFFORDSHIRE TERRIER

HARD-WORKING AND LOYAL DOGS.

- Intelligent, hard-working, and stoic dogs.
- Very loyal to family and usually good with children. May not get along well with other dogs.
- American Staffordshire Terriers seem to enjoy dog sports such as agility, flyball, rally and competitive obedience.
- The American Staffordshire Terrier 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.



DID YOU KNOW?

The American Staffordshire Terrier isn't originally from America. Instead, these hard-working loyal dogs have their roots in England. Back in the 19th century, various terriers were crossed with bulldogs, producing their ancestor – the English Staffordshire Terrier. As their modern, transatlantic cousin, the American Staffordshire Terrier is a very different animal, quite literally. In the US, they were specifically bred to be bigger and heavier – and used for dog fighting until it was eventually banned in the early 1900s. In 1936, the American Kennel Club officially recognized them as a breed. Today, we recognize them for their intelligent and extremely loyal natures.

CHOW CHOW

THESE NOBLE DOGS ARE ORIGINALLY FROM NORTHERN CHINA.

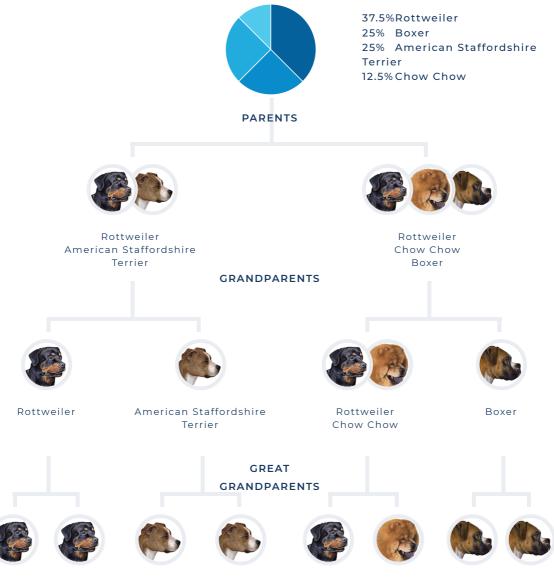
- Reputation as a loyal family dog.
- Reserved and wary with strangers.
- Independent spirit, but responds to reward-based obedience training.
- The Chow Chow was originally bred for various purposes including the guarding of people and/or property. Individual members of this breed will benefit from firm and dedicated training to temper this guarding tendency, and thus help to maintain safety as a household companion.

Height 18 - 22 in
Weight (show) 40 - 65 lb
Weight (pet) 42 - 69 lb

DID YOU KNOW?

Aloof and loyal, these noble dogs are originally from northern China (though some have argued they migrated there from Mongolia and elsewhere). In their native land, they are called Songshi Quan, which means 'puffy-lion dog'. It is thought the breed first appeared 2,000 years ago. They were mainly used for hunting and guarding sacred temples from evil entities. The East India Company brought them to England in 1781 and Queen Victoria received one as a gift in 1865. During the 1880s, more and more Chow Chows were imported in large numbers. Today, these puffy lions are the pride of many an owner's home.

SOPHIE'S FAMILY TREE



Rottweiler Rottweiler

American American Staffordshire Staffordshire Terrier Terrier

Rottweiler Chow Chow

Boxer

Boxer

SOPHIE'S HEALTH RESULTS

SAMPLE ID: T204715

We have tested Sophie'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)



Sophie 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

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

SOPHIE'S TRAITS

SAMPLE ID: T204715

Tail Length Genotype: CC	Sophie 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.)
Furnishings	Sophie 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 Main Possibilities Genotype: ay/at E m/E KB/ky,kbr/ky I/ wt	Sophie appears to be mostly dark in color (either black or brown) or dark with 'tiger' striping (called 'brindle'). They also have the gene for a 'mask' pattern on their face - as it's for dark hair, you may not be able to see any tan coloring there. Did you know black is one of the most common coat colors in mixed breed dogs, while brindle is common in many of the 'Guard' and 'Terrier' breeds, like the American Staffordshire Terrier and Chihuahua?
Ear Carriage Genotype: CC	A lot of factors can decide the shape of a dog's ear. But as far as we can tell, Sophie probably has 'drop' or floppy ears. This type of ear is dominant, needing only one copy of the gene to show it. That's why it's so common in mixed breed dogs. Common breeds with drop ears include hounds, Labrador, Poodle and spaniels.
Base Pigment Color Genotype: B/bc	Sophie 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.
Leg Length Genotype: DD	Sophie'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?
Coat Length and Type Genotype: GG CC	Sophie's coat is probably on the short side. The exact length of a dog's coat is down to several factors so it can vary. Did you know some genes can even change how a short coat looks, including adding 'feathering', which results in longer hairs behind the ears, under the belly, and behind the legs?

IDEAL WEIGHT

SAMPLE ID: T204715

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



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

CALCULATING WEIGHT

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

W ≩ S D O M[™] PANEL



STATEMENT OF AUTHENTICATION

Owner's Name: **Rod Allrich** Dog's Name: **Sophie** Sample Id: **T204715** Date: **April 26, 2019**

This certifies the authenticity of Sophie'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 Sophie's ancestry using the Wisdom Health proprietary breed detection algorithm.

