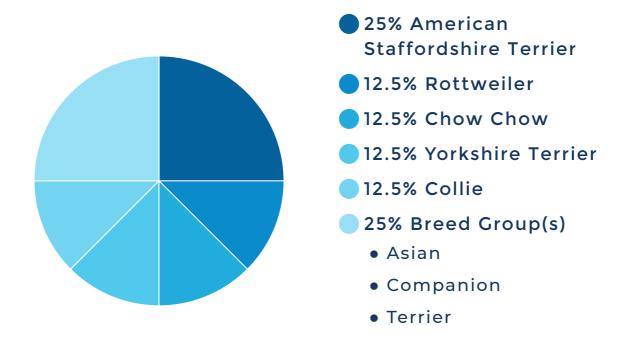


The results are in! Let's take a look at what the DNA told us about Toklo's ancestry...

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TOKLO'S BREED BY PERCENTAGE



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

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.
 - ► Height17 19 in
 - Weight (show)40 60 lb
 - Weight (pet)38 68 lb



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.

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.



► Height

23 - 27 in

Weight (show)

84 - 120 lb

Weight (pet)

72 - 132 lb

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.

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.

YORKSHIRE TERRIER

INTRODUCED TO THE UNITED STATES IN 1872.

- Active, alert, and intelligent dogs.
- Stubborn tendencies may be reduced via reward-based obedience training.
- Enjoy dog sports such as earthdog trials, agility, rally, tracking, flyball, Frisbee, musical freestyle, and obedience.
- Although they get along well with other small dogs, Yorkshire Terriers may bark when confronted with larger dogs.



► Height

7 - 8 in

Weight (show)

3 - 6.5 lb

► Weight (pet)

2 - 10 lb

DID YOU KNOW?

In the 19th century, Scottish weavers were forced out of work because of the industrial revolution and moved to northern England in the hope of supporting their families. They also brought their dogs with them. The Yorkshire Terrier we know today evolved from this breed, with many believing that the bloodlines of Paisley and Clydesdale Terriers were also added to the mix. These lovely dogs were introduced to the United States in 1872. However, they were very different to today's Yorkshire terrier. Selective breeding has reduced the average weight of the breed from 30 pounds to less than 10 pounds. Over the years, they may have gone down in weight, but never in our estimation.

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.

BREED GROUPS TOKLO IS MOST LIKELY RELATED TO

We tested Toklo'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 Toklo 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.

ASIAN GROUP

The Asian Group is comprised mainly of breeds from the Asian and Arctic regions of the world. Often bred for guarding or working they have been invaluable assets to man throughout the ages.

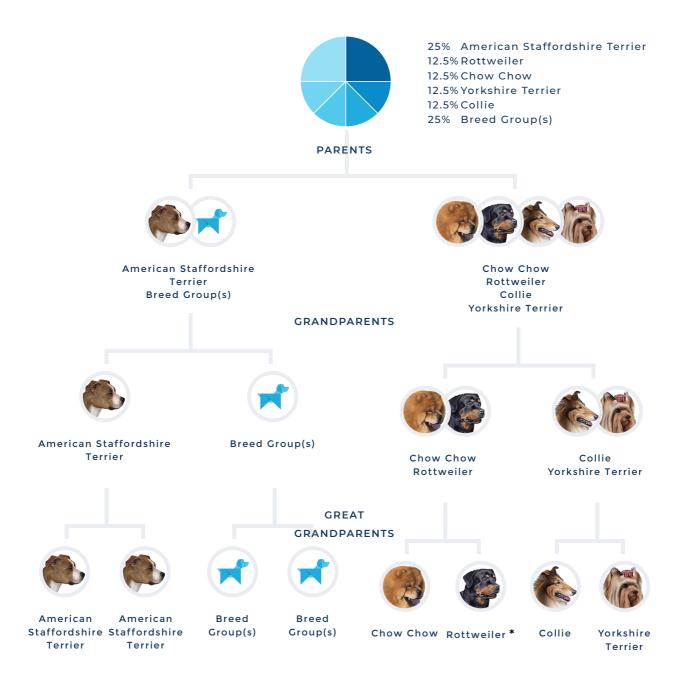
COMPANION GROUP

This group consists of dogs typically bred for the specific purpose of human companionship, and many are popular pets because of their gentle nature. They became more common as the concept and luxury of dogs as pets prevailed.

TERRIER GROUP

The Terrier Group ancestors were bred to hunt and kill vermin. They are often characterized as feisty and energetic dogs whose sizes range from fairly small to much larger.

TOKLO'S FAMILY TREE



* This particular ancestor's breed has been detected, however at a lesser contribution.

This suggests the breed is likely present further back in the ancestry.

TOKLO'S HEALTH RESULTS

SAMPLE ID: T204705

We have tested Toklo'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

Toklo 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

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

TOKLO'S TRAITS

SAMPLE ID: T204705

Coat Color Main
Possibilities
Genotype: ay/at E
m/E KB/ky,kbr/ky
wt/wt

Toklo 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?

Coat Length and Type Genotype: GG CC

Toklo'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?

Coat Color Subtypes Genotype: ay/at m/ m h/h S/sp

Toklo 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?)

Leg Length Genotype: DD

Toklo'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

Toklo 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

Toklo 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: TT

A lot of factors can decide the shape of a dog's ear. But as far as we can tell, Toklo probably has perk or upright ears. Did you know this type of ear is recessive (which means you need a copy from each parent to show it)? Common breeds with upright ears include German Shepherd, Chihuahua and Husky.

IDEAL WEIGHT

SAMPLE ID: T204705

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

34 lbs - 57 lbs

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

CALCULATING WEIGHT

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





STATEMENT OF AUTHENTICATION

Owner's Name: Rod Allrich

Dog's Name: Toklo

Sample Id: T204705

Date: October 22, 2019

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

