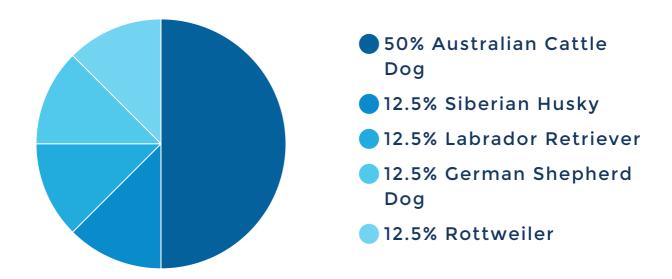


The results are in! Let's take a look at what the DNA told us about Max's ancestry...

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MAX'S BREED BY PERCENTAGE

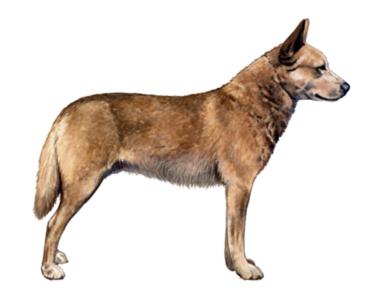


Exciting news, the results are in! Here's what makes Max so unique. Using the data generated from Max's DNA, our sophisticated computer algorithm performed over 17 million calculations! What you see here is Max's ancestry by percentage.

AUSTRALIAN CATTLE DOG

IT'S NOT UNCOMMON TO FIND THEM CHASING CARS.

- Intelligent, active, energetic, and watchful dogs.
- Eager to learn and responds well to reward-based training, allowing them to participate
 in activities such as agility, flyball, and Frisbee.
- Herding tendencies may lead to chasing cars or herding children.
- May be suspicious or cautious around strangers requiring careful socialization with rewards to prevent or reduce fear-based defensive aggression.
 - ► Height 17 - 20 in
 - Weight (show)33 44 lb
 - Weight (pet)31 53 lb



DID YOU KNOW?

The clever and free-spirited Australian Cattle dog is the result, quite literally, of the Old World and New World coming together. More specifically, a native Dingo and a blue-speckled, smooth-coated Collie imported all the way from Scotland. It was their offspring in the 1830s that became the breed's first direct ancestor. The aim was to produce a vigilant herding dog who could also handle Australia's harsh climate. The experiment was a success - perhaps too much so. Over 150 years later, they still have very strong herding instincts. It's not uncommon to find them chasing cars or even trying to round up children. But those same instincts also make them very protective and loyal. And very dear to us.

SIBERIAN HUSKY

INTELLIGENT AND HARD-WORKING DOGS.

- Active, social, and usually friendly dogs; often do well with children and other dogs.
- Siberian Huskies are energetic dogs and participate in dog sports such as sledding, skijoring (pulling a skier), and carting.
- Stubborn tendencies may be lessened by using reward-based training involving small treats and favorite toys.
- May engage in digging; might chase wildlife.
 - ► Height 21 - 23 in
 - Weight (show)35 60 lb
 - Weight (pet)34 67 lb



DID YOU KNOW?

These intelligent and hard-working dogs have been used in a number of roles over the centuries. In no particular order, they include herding reindeer, pulling sleds and even keeping children warm. They have a long history of helping humans, in fact. Some say the breed began with the Chukchi tribe of Siberia, though various other tribes are occasionally credited with helping them evolve too. Siberian Huskies were made famous in 1925 when they delivered a diphtheria serum after a city was stricken by an epidemic. Though built for the harsher climes of Siberia, they managed to find their way to America in 1909. As one of the most popular dogs in the Unites States today, we're glad they made the journey.

LABRADOR RETRIEVER

GENTLE AND TRUSTING.

- Usually happy-go-lucky, calm, or easygoing dogs, though some may be energetic.
- Usually friendly and are generally good family dogs.
- Labrador Retrievers enjoy dog sports such as agility, hunting, tracking, rally and competitive obedience; retrieving and swimming.
- Quite food motivated, which may make it easier to teach the Labrador Retriever to drop retrieved items not intended for play.
 - Height21 24 in
 - Weight (show)55 66 lb
 - Weight (pet)49 77 lb



DID YOU KNOW?

Gentle and trusting, this popular breed can trace its roots to the coast of Newfoundland, Canada where, in the 17th century, they were known as the 'Lesser Newfoundland.' Labradors are thought to have descended from the now extinct 'St. John's Water Dog', and were initially trained to retrieve fishing nets from the cold waters of the North Atlantic. Tradition has it the Earl of Malmesbury first coined the name 'Labrador' in order to differentiate these dogs from their Newfoundland ancestors. It was English fishermen who originally brought the breed to England in the 19th century. There, they were much lauded for their retrieving skills. And much loved for their affectionate natures.

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.
 - Height22 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.

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.
 - Height23 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.

MAX'S FAMILY TREE



50% Australian Cattle Dog 12.5% Siberian Husky 12.5% Labrador Retriever 12.5% German Shepherd Dog 12.5% Rottweiler



Australian Cattle Dog



German Shepherd Dog Rottweiler Labrador Retriever Siberian Husky

GRANDPARENTS



Australian Cattle Dog



Australian Cattle Dog



German Shepherd Dog Rottweiler



Labrador Retriever Siberian Husky

GREAT GRANDPARENTS



Australian Cattle Dog



Australian Cattle Dog



Australian Cattle Dog



Australian Cattle Dog



German Shepherd Dog



Rottweiler



Labrador Retriever



Siberian Husky

MAX'S HEALTH RESULTS

SAMPLE ID: T204718

We have tested Max'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

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

EXERCISE-INDUCED COLLAPSE (EIC)



CIFAR

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

MAX'S TRAITS

SAMPLE ID: T204718

Furnishings	Max 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	Max 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	Max'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	Max 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	Max 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, Max 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.
Coat Length and Type Genotype: GT CC	Max'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 Main Possibilities Genotype: at/at E/E KB/ky,kbr/ky I/wt	Max appears to be mostly dark in color (either black or brown) or dark with 'tiger' striping (called 'brindle'). The brindle likely covers most of their body except for a dark 'saddle-shaped' area over their back. (If it's the latter, congratulations, by the way. This is seriously rare.)

IDEAL WEIGHT

SAMPLE ID: T204718

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

44 lbs - 76 lbs

We've factored everything we know about Max in predicting a healthy, adult weight. However environmental factors such as the nutrition of Max's mom during pregnancy and nursing, Max's nutrition during critical growth months,

illness/parasites/ticks/fleas, and exercise levels can affect the actual weight of Max.

CALCULATING WEIGHT

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





STATEMENT OF AUTHENTICATION

Owner's Name: Rod Allrich

Dog's Name: Max

Sample Id: T204718

Date: November 7, 2019

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

