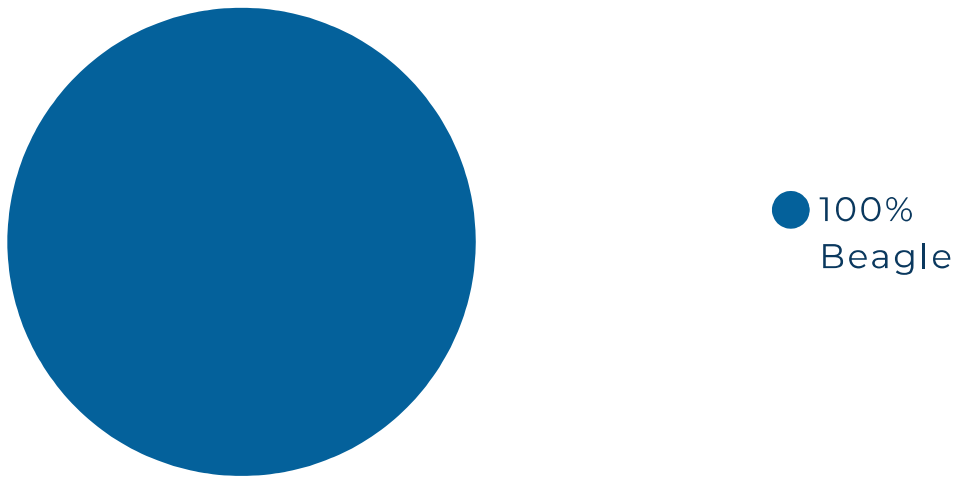


DISCOVER ALL
ABOUT OLIVER

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

OLIVER'S BREED BY PERCENTAGE



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

BEAGLE

THEY WERE ONCE USED FOR HUNTING HARE, QUAIL AND PHEASANT.

- Happy or gentle nature, and usually friendly dogs; although some have high energy levels.
- Beagles seem to enjoy dog sports such as tracking, hunting, agility, rally and competitive obedience.
- Respond well to reward-based training involving treats or favorite toys.
- Chasing wildlife or barking may impair bonding.

► **Height**

13 - 16 in

► **Weight (show)**

20 - 30 lb

► **Weight (pet)**

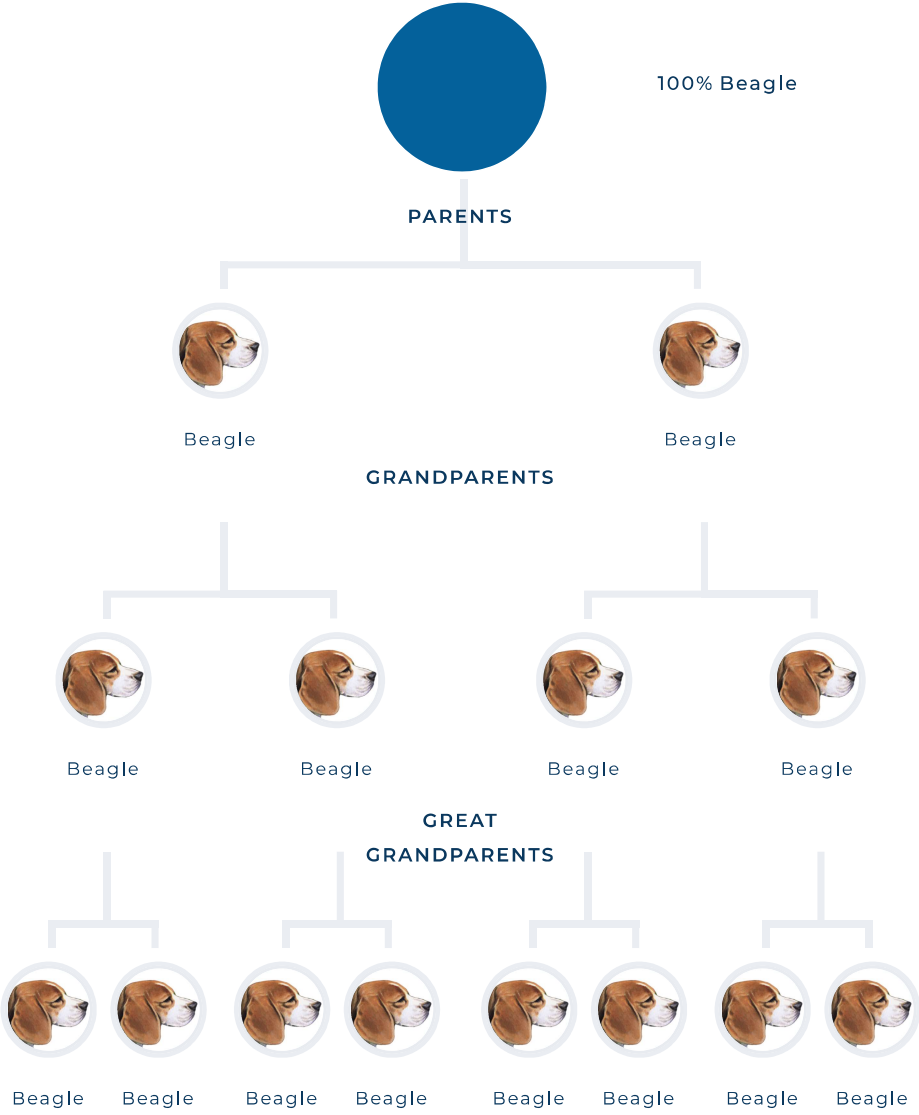
17 - 37 lb



DID YOU KNOW?

These iconic dogs are a long-established breed and are descended from the Foxhound, the Harrier and the Kerry Beagle. They were once used for hunting hare, quail and pheasant, although nowadays they also make excellent family dogs. They love to follow a scent, and with over 200 million scent receptors in their nose, have understandably been used for police work. The origin of their name is still debated. Some believe it's from the Celtic word 'beag', which means 'small', while others say it's from the French word 'begle', which means 'useless' or 'of little value'. But for anyone who's had one of these happy characters in their lives, the latter seems very unlikely indeed.

OLIVER'S FAMILY TREE



OLIVER'S HEALTH RESULTS

We have tested Oliver's DNA for the following important genetic health conditions.
The results can be seen below.

MULTIDRUG SENSITIVITY (MDR1)



CLEAR

Oliver 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

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

OLIVER'S TRAITS

Furnishings	Oliver 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?
Base Pigment Color	Oliver 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	Oliver'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?
Tail Length	Oliver 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.)
Coat Color Subtypes	Oliver 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	Oliver probably has a dark-colored 'saddle' pattern on their back, which is common in breeds like the German Shepherd and Beagle. 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?
Ear Carriage	A lot of factors can decide the shape of a dog's ear. But as far as we can tell, Oliver 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.
Leg Length	Oliver'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?

IDEAL WEIGHT

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

26 lbs - **45** lbs

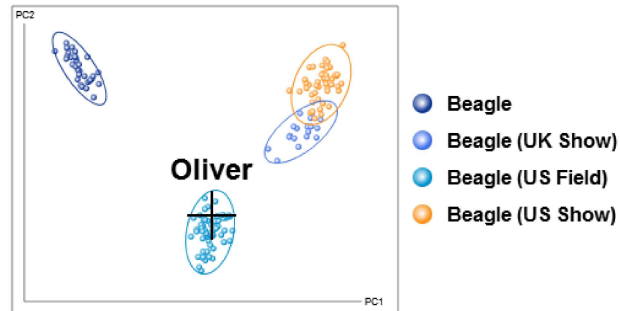
Maintaining a healthy weight is a key factor in Oliver having a long and healthy life.

ADDITIONAL BREED TESTS

Our family tree analysis shows that Oliver 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.

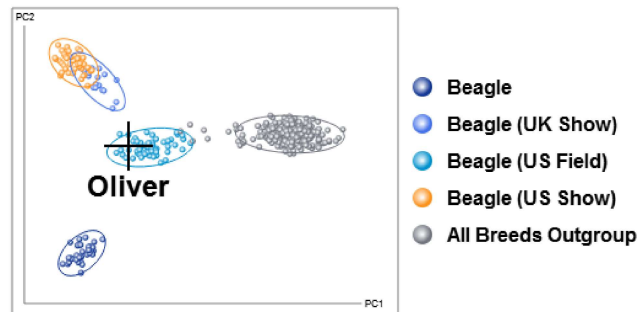
Single Breed Comparison

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



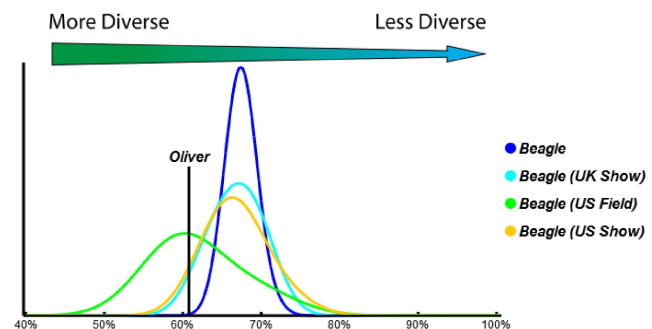
Single Breed Vs. All Breeds

Here we have compared Oliver's data to Beagle samples, and also a single representative sample from the other breeds in the WISDOM PANEL database. This is another way of showing that Oliver's data is more like the Beagle than any other breed. Oliver's sample falls within the Beagle cluster showing that Oliver'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 Oliver'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. Oliver's homozygosity score falls within the range for the Beagle samples found in the WISDOM PANEL database.



WISDOMTM PANEL



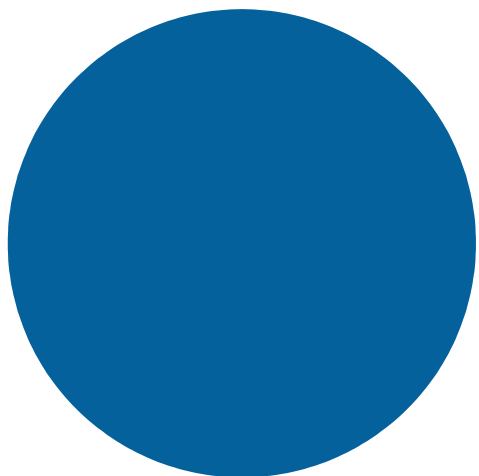
STATEMENT OF AUTHENTICATION

Owner's Name: **Rod Allrich**

Dog's Name: **Oliver**

Date: **December 8, 2018**

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



● 100% Beagle