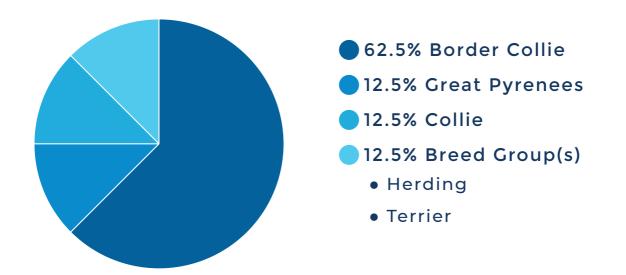
## **DISCOVER ALL**

## ABOUT FINNEGAN

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

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## FINNEGAN'S BREED BY PERCENTAGE



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

## **BORDER COLLIE**

#### KEEN AND TENACIOUS.

- Very intelligent, obedient, active, energetic and watchful dogs.
- Eager to learn and respond well to reward-based training.
- Enjoy activities including agility, flyball, herding, retrieving, Frisbee, rally, and competitive obedience.
- May attempt to herd children and chase moving vehicles; the Border Collie stare may be perceived by other dogs as threatening.



#### DID YOU KNOW?

Keen and tenacious, the Border Collie has been many a shepherd's best friend. Their origins go back to the 1700s, when they guarded flocks in the Anglo-Scottish border region. Bred by Scottish and English shepherds specifically for their herding skills, they quickly developed an excellent reputation. Indeed, they were eventually brought over to the United States in the 1880s - where they played a key role in sheep ranching. A farmer named Adam Telfer is thought to be responsible for the modern breed, and every Collie today descended from his dog 'Old Hemp'. Many believe the Border Collie is the most intelligent dog on the world. For the many families who have one to love, they're certainly the smart choice of pet.

## **GREAT PYRENEES**

#### THEY HAVE EXISTED FOR SEVERAL MILLENNIA.

- Intelligent, watchful, and generally calm dogs.
- Great Pyrenees seem to enjoy dog sports such as agility, tracking and competitive obedience as well as hiking, backpacking and carting.
- Independent spirit but responds well to a reward-based approach to training involving treats or favorite toys.
- Can be standoffish and wary with strangers and has a tendency to bark.

Height 25 - 27 in
Weight (show) 80 - 120 lb
Weight (pet) 66 - 138 lb

#### DID YOU KNOW?

Rumor has it this breed is so old they are literally fossilized. Certainly many agree that they have existed for several millennia, possibly even dating as far back as 1800 BC. Their assumed direct ancestors include the Kuvasz, the Maremma Sheepdog and the Anatolian Shepherd. Eventually the breed was brought to Europe, and the Pyrenees mountains, where they were renowned as great herders. During the 1600s, Louis XIV declared these gentle and affectionate souls to be the Royal Dog of France. They were first brought to America in the early 19th century but numbers fell significantly after that. B. Senac-Lagrange and M. Dretzen are credited with eventually helping increase their population again. Which earns them a mountain of gratitude from us.

## 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 FINNEGAN IS MOST LIKELY RELATED TO

We tested Finnegan'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 Finnegan 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.

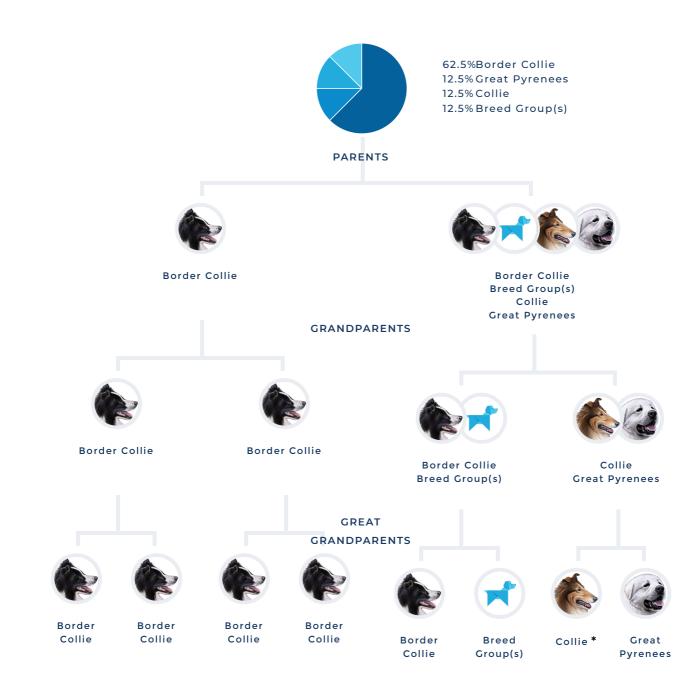
### HERDING GROUP

The herding group is a diverse category. These highly intelligent breeds were developed to guard and control the movement of livestock.

#### **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.

## FINNEGAN'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.

## FINNEGAN'S HEALTH RESULTS

### SAMPLE ID: T204678

We have tested Finnegan'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)



Finnegan has one copy of the MDR1 mutation, and may be at risk of adverse side effects to some commonly used drugs. Please share these results with your veterinarian.

## EXERCISE-INDUCED COLLAPSE (EIC)



CLEAR

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

## **FINNEGAN'S TRAITS**

#### SAMPLE ID: T204678

Furnishings	Finnegan 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	Finnegan 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	Finnegan'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	Finnegan 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/bs	Finnegan 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: CT	A lot of factors can decide the shape of a dog's ear. But as far as we can tell, Finnegan 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 Length and Type Genotype: TT CC	Finnegan'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?
Coat Color Main Possibilities Genotype: at/at E/E ky/ky I/wt	Finnegan 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?

## **IDEAL WEIGHT**

### **SAMPLE ID: T204678**

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



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

## CALCULATING WEIGHT

Our weight-predictive algorithm uses a combination of the following to calculate Finnegan'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<sup>™</sup> 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 Finnegan having a long and healthy life.

# W ≩ S D O M<sup>™</sup> PANEL



#### STATEMENT OF AUTHENTICATION

Owner's Name: Rod Allrich Dog's Name: Finnegan Sample Id: T204678 Date: November 10, 2019

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

