

Wisdom Panel[®] Insights[™]

Congratulations!

Sage is a Australian Cattle Dog,
Border Collie, Collie, Gordon
Setter Mix

In the following pages, you will learn about:

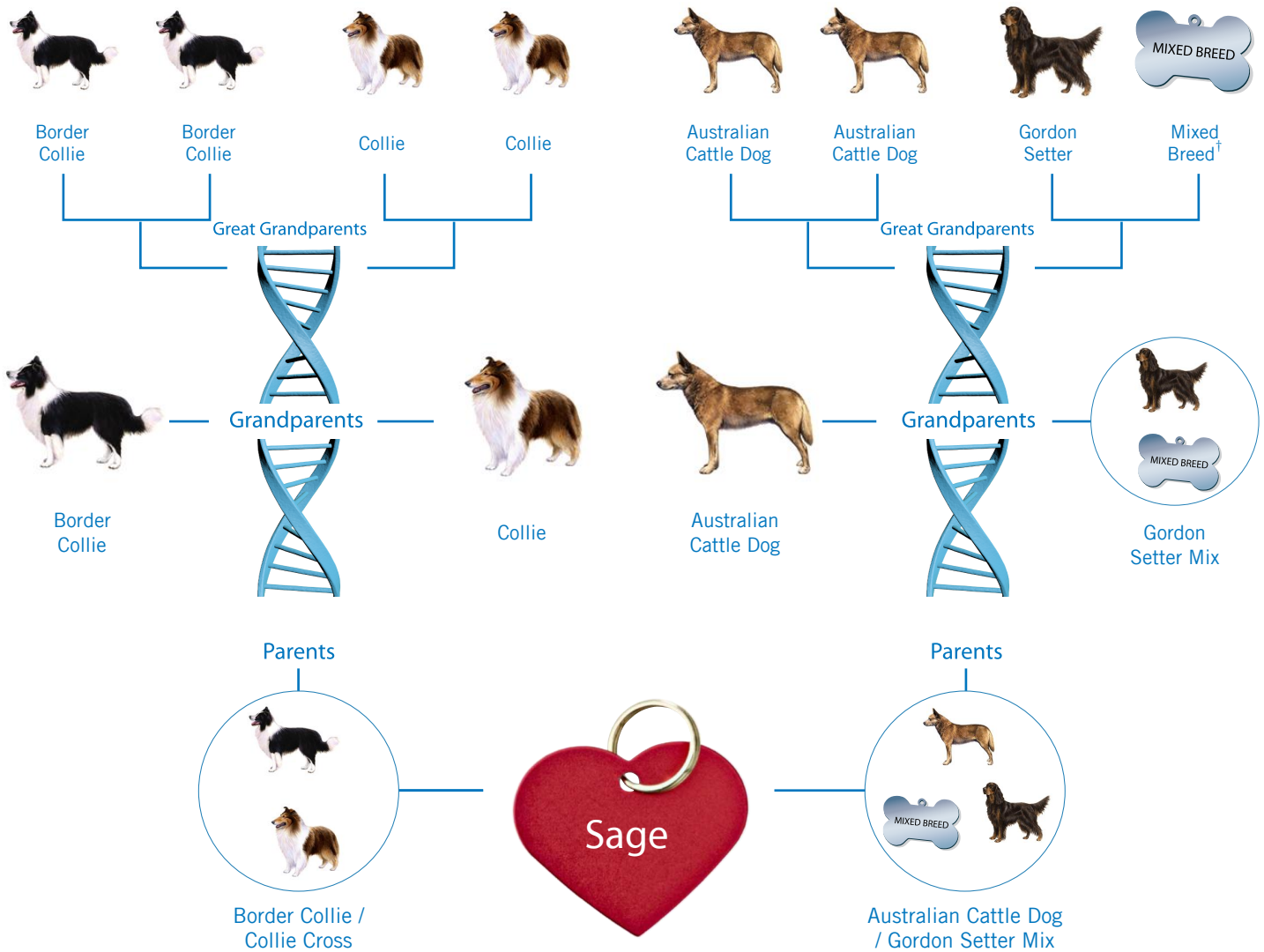
- KEY BREEDS DETECTED
- KEY BREED HISTORY, APPEARANCE, AND BEHAVIOR
- HOW KEY PHYSICAL TRAITS ARE INHERITED
- OTHER POSSIBLE MIXED BREED SIGNATURES
- PREDICTED WEIGHT
- HOW TO UPLOAD A PHOTO AND SHARE YOUR STORY
- ADDITIONAL INFORMATION



- **KEY BREEDS DETECTED**
- **KEY BREED HISTORY, APPEARANCE & BEHAVIOR**
- **HOW KEY PHYSICAL TRAITS ARE INHERITED**
- **MIXED BREED SIGNATURES (IF DETECTED)**
- **ADDITIONAL INFORMATION**
- **CERTIFICATE**

YOU HAVE A AUSTRALIAN CATTLE DOG, BORDER COLLIE, COLLIE, GORDON SETTER MIX

The **Wisdom Panel® Insights™** computer algorithm performed over seven million calculations using 11 different models (from a single breed to complex combinations of breeds) to predict the most likely combination of pure and mixed breed dogs in the last 3 ancestral generations that best fit the DNA marker pattern observed in Sage. The ancestry chart depicting the best statistical result of this analysis is shown in the picture below.



† Interested in the Mixed Breed ancestry? Look for the Mixed Breed Signatures page later in the report!



AUSTRALIAN CATTLE DOG



HEIGHT:

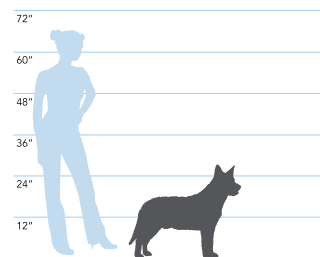
17 - 20 in

WEIGHT (SHOW):

33 - 44 lb

WEIGHT (PET):

31 - 53 lb



EARS



MUZZLE

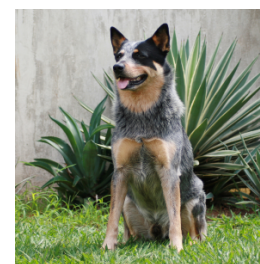
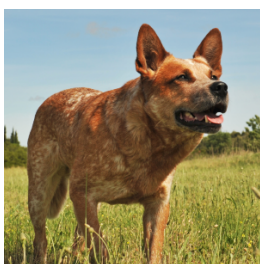


TAIL



The Australian Cattle Dog was developed in the late nineteenth century. Australian settlers were in need of a dog that had the stamina to withstand the rigors of the harsh climate and conditions of the country. They also needed a dog that would be able to properly herd their animals. The breeding efforts began in the 1830's when a native Dingo was crossed with a blue-speckled, smooth-coated Collie imported from Scotland. The litter that resulted is considered to be the Australian Cattle Dog's earliest direct ancestors. The breed was introduced into the United States by two Californian fanciers in the late 1960's and the American Kennel Club recognized the Australian Cattle Dog as an official breed in 1980.

The Australian Cattle Dog comes in either Blue Speckle (black, gray, or tan) or Red Speckle, where the coat is speckled or mottled. Black, red or tan patches or markings also exist.



DO YOU RECOGNIZE ANY OF THESE AUSTRALIAN CATTLE DOG TRAITS IN SAGE?

- Intelligent, active, energetic, and watchful dogs.
- Herding tendencies may lead to chasing cars or herding children.
- Eager to learn and responds well to reward-based training, allowing them to participate in activities such as agility, flyball, and Frisbee.
- May be suspicious or cautious around strangers requiring careful socialization with rewards to prevent or reduce fear-based defensive aggression.



BORDER COLLIE



HEIGHT:

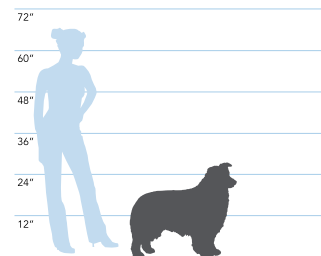
18 - 21 in

WEIGHT (SHOW):

33 - 44 lb

WEIGHT (PET):

31 - 53 lb



EARS



MUZZLE

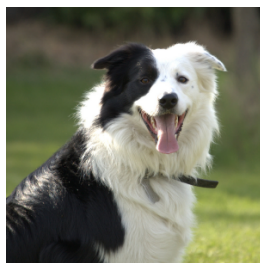
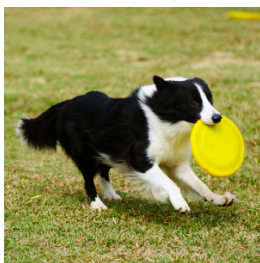


TAIL



The Border Collie can be traced back to the 1700's where they were traditionally used by shepherds in Scotland and England. They were developed for their herding skills and quickly acquired an excellent reputation. The Border Collie has keen herding instincts and their power over sheep has proven to be an asset to shepherds. In 1894, an effort was made by a farmer named Adam Telfer to tone down the breed's mannerisms. Telfer succeeded and today's Border Collies are descendants of Telfer's dogs. The Border Collie was introduced into the United States in the 1880's, where it played a key role in sheep ranching in the western states. The Border Collie was officially recognized by the American Kennel Club in 1995.

The Border Collie comes in a range of colors which includes solid, bicolor, tricolor, merle (mottled) and sable. The solid colors include black, blue (a shade of gray), gold, brindle (black and brown stripes) and red. The white markings are generally but not always symmetrical.



DO YOU RECOGNIZE ANY OF THESE BORDER COLLIE TRAITS IN SAGE?

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



COLLIE



HEIGHT:

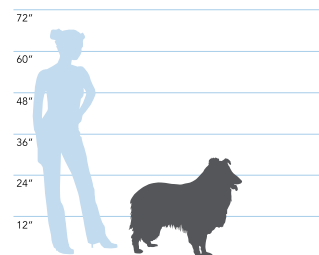
20 - 24 in

WEIGHT (SHOW):

45 - 75 lb

WEIGHT (PET):

44 - 79 lb



EARS



MUZZLE

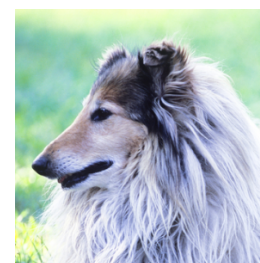
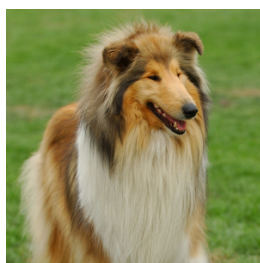
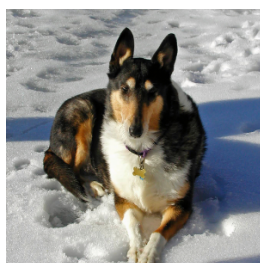


TAIL



The Collie originated in Scotland, where they were bred for hundreds of years to work as shepherds and guard dogs. Today the Collie is one of the most popular breeds in the world. Over the years, the Collie has developed an amazing level of intelligence and the breed has been used for herding, protection, water rescue and as a guide for the blind. Queen Victoria, J.P. Morgan, Jim Reeves, Cecil Hepworth, Brooke Langton, Mario Lemieux, David Duchovny, President Coolidge and President Hoover have all owned Collies at some point during history. The Collie's reputation for bravery, loyalty and intelligence was further enforced after the release of the film, "Lassie Come Home" in 1943 and popularity soared through the '40's and '50's when the TV Lassie series idealized the Collie as a family dog. The health of the breed suffered somewhat as indiscriminate breeding took place to capitalize upon the breed's popularity, but today Collies remain consistently popular with pet owners. The breed received American Kennel Club recognition in 1885.

The four main AKC coat descriptions are "Sable and White" (Sable is a variety of tan shades), "Tri-Color" (Mainly black with white and tan markings), "Blue Merle" (A mottled coat of various shades) and "White" (One of the other types with more white in the coat). The coat may be either short (Smooth) or long (Rough). Blazes of white across the muzzle and chest are common in this breed.



DO YOU RECOGNIZE ANY OF THESE COLLIE TRAITS IN SAGE?

- Intelligent, obedient, active, and watchful dogs.
- Collies seem to enjoy dog sports such as agility, flyball, Frisbee, tracking, rally and competitive obedience.
- Collies are eager to learn especially with reward-based training,
- Although they are often good with children and are usually friendly, some Collies can be wary or reserved with strangers.



GORDON SETTER



HEIGHT:

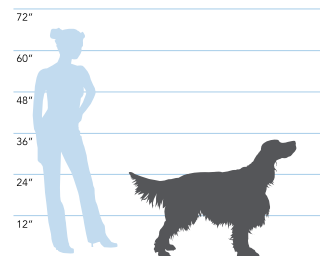
25 - 26 in

WEIGHT (SHOW):

50 - 72 lb

WEIGHT (PET):

44 - 83 lb



EARS



MUZZLE

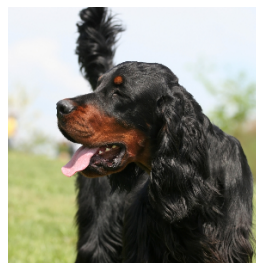


TAIL



The Gordon Setter is a member of the Setter Family, which includes the more common Irish and English Setters. Gordon Setters were bred for their hunting abilities; particularly for hunting grouse and other similar birds. They were first referred to as “Black and Fallow Setting Dogs.” Direct ancestors of the Gordon Setter include the Spanish Pointer and other Spanish breeds. Early development is believed to have included Irish Setter blood. The Duke of Gordon established the breed in 1827. They were first introduced to the United States in 1842, where they quickly became very popular and were officially recognized by the American Kennel Club in 1892.

The Gordon Setter has a coat which may be straight or slightly wavy and comes in black and tan markings. The tan varies from a rich chestnut to a deep mahogany color. A red coat is possible, though not accepted under the breed standard.



DO YOU RECOGNIZE ANY OF THESE GORDON SETTER TRAITS IN SAGE?

- Active, alert, and intelligent dogs.
- Stubbornness may be reduced using motivational tools such as toys and treats in reward-based training.
- Gordon Setters enjoy dog sports such as field trials, hunting, agility, tracking, and obedience.
- Although usually friendly, some may be reserved with strangers.



HOW ARE KEY PHYSICAL TRAITS INHERITED?

THE INFLUENCE OF BREEDS ON APPEARANCE

This report reveals the breeds detected in your dog's DNA. It also includes checklists of physical traits associated with these breeds. Breeds can combine their influences in countless, fascinating ways. It's a unique combination that makes your dog one-of-a-kind.

Your dog may behave like - or strongly resemble - just one of the breeds in its makeup, but - much more commonly - your dog's looks and personality will blend aspects of these breeds. Consider the example below...

In this example, you can see how many of Tula's physical traits are due to a blending of breed influences.

YELLOW COAT COLOR

requires two copies of a gene variant and is available from the Labrador Retriever, Poodle, and Golden Retriever.

BLACK NOSE

eyerims, lips, and pads on her feet are all due to one copy of the black gene variant that is available from all three ancestral breeds.

SOFT CURL

is coming from one copy of the curly gene variant from the Poodle and one copy of the straight variant from the Golden Retriever parent.

FURNISHINGS

- the "beard" and "eyebrows" - is due to one copy of the furnishing gene variant from the Poodle.

SHORT HAIR

is due to one copy of one gene variant from the Labrador Retriever that is dominant to the long coat of the Golden Retriever and Poodle.

Wisdom Panel® Insights™ found these breeds in our example dog Tula:



Golden Retriever



Labrador Retriever



Standard Poodle



For additional information, watch an illustrative video at <http://youtu.be/UAcPOch4-C8> - it provides educational content around canine DNA, the basic blueprint for life, and a closer look at inherited genes.

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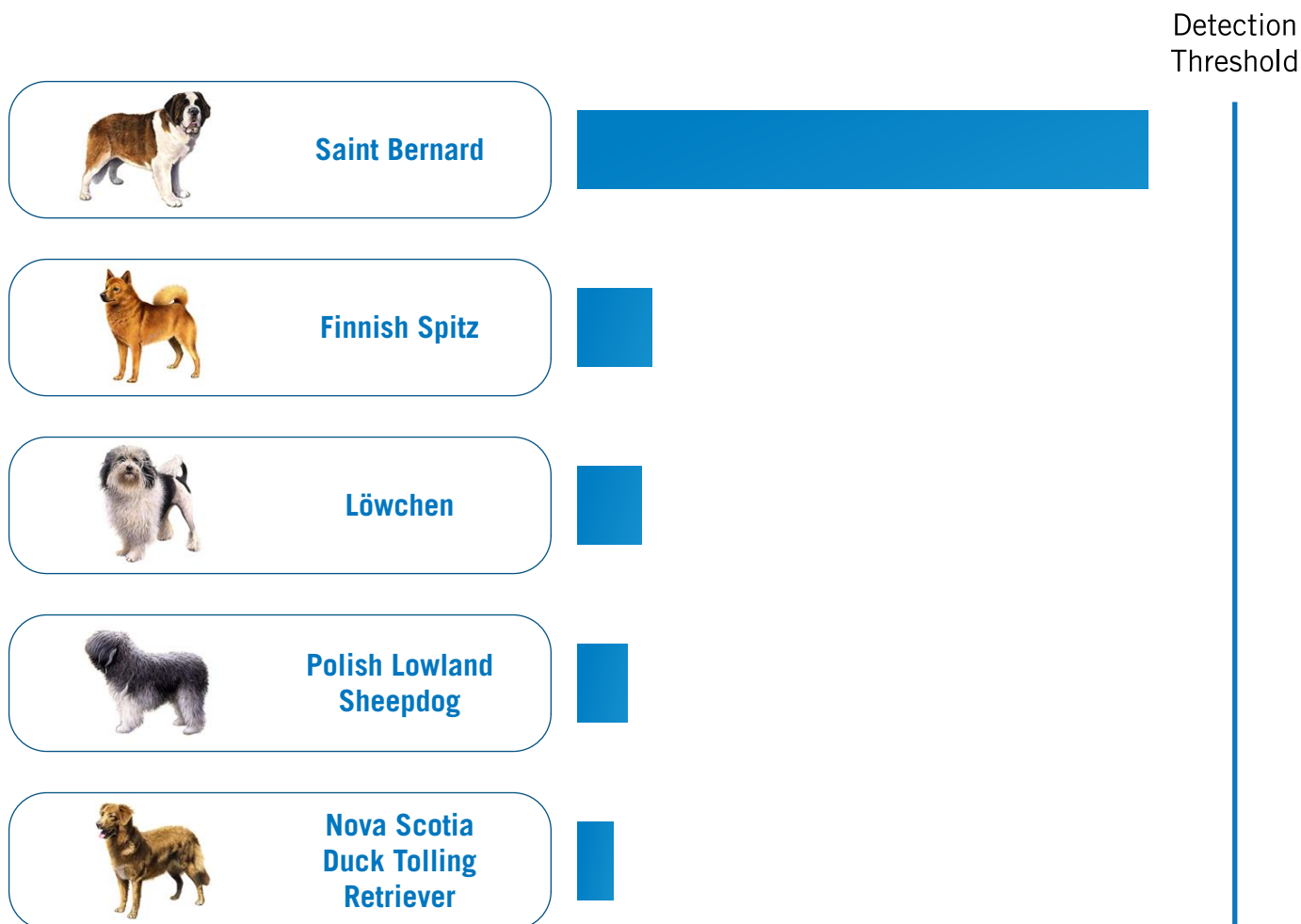


WHAT DOES THE MIXED BREED ANCESTRY MEAN FOR SAGE?

A portion of Sage's ancestry was predicted to be mixed beyond 3 generations. While it is difficult to identify strong breed signals in this mixed portion, the 5 breeds with the strongest statistical likelihood identified in the analysis of your dog's DNA are listed below.

The breeds are listed by the relative strength of each result in the analysis with the most likely at the top of the list. One or more of these breeds **could have** contributed to the genetic makeup of the ancestors indicated by the mixed breed icon. Note that it is highly unlikely that all these breeds are present in Sage's ancestry.

There could also be a breed or breeds present in the mixed breed component that cannot be detected with the current database of over 200 breeds.



For more information about how Wisdom Panel Insights is performed, please see the “HOW WISDOM PANEL INSIGHTS WORKS” section later in this report.



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PREDICTED ADULT WEIGHT PROFILE:

Based upon the breeds detected in Sage's ancestry and the genetic markers analyzed by **Wisdom Panel® Insights™**, as well as the information provided that Sage is **Female** and **Spayed**, we have calculated the likely weight that Sage should reach when an adult. The **Wisdom Panel Insights** target weight profile is presented as a range based on the unique mix and proportion of breeds detected.

- The adult weight is predicted to be between 46 - 71 lbs.

Many factors can influence an adult dog's weight, including sex and neuter status. Both of these factors have been used to calculate the predicted weight profile. Another major influence on canine weight is body condition score, which is a factor of your dog's lifetime nutrition and exercise regimen. If your dog's body condition is different from the ideal body condition score, we anticipate that your dog might be under (if underweight) or over (if overweight) the weight predicted by **Wisdom Panel Insights**.

To learn more about assessing body condition score, please use the Royal Canin™ Body Condition Score Chart: <http://www.royalcanin.co.uk/products/products/dog-s-body-condition2>

More information on this can be found at: <http://www.wisdompanelpro.com/sizeprediction/>



CUSTOMIZE YOUR DOG'S CERTIFICATE:

You can now include a photo of your dog on your certificate.

- Simply go to: http://www.wisdompanel.com/test_status_checker/ or go to www.wisdompanel.com and click on the TEST STATUS CHECKER box at the top
- Enter your last name and test sample ID #
- Click on the UPLOAD PHOTO button
- Follow the pop-up instructions to upload your dog's photo



BECAUSE YOU LOVE YOUR DOG - SHARE THEIR STORY!

Join our online community of dog owners and share your dog's **Wisdom Panel Insights** story with the world. At **WisdomPanel.com** you can:

- Register your dog and upload photos into our Wisdom Panel photo gallery at: http://www.wisdompanel.com/photo_gallery/
- Get help to show off your dog's breed profile on your blog, Facebook and Twitter

Use these details to create your dog's profile at wisdompanel.com:

Owner: removed
Report Code: removed



You can also post your story on our Facebook page, Doggie DNA, and don't forget to follow us on Twitter!



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Thank you for using Wisdom Panel® Insights™ to uncover the story of your dog's ancestry!

Congratulations on taking the steps to learn about Sage's ancestry and to understand what breeds are in your mixed breed dog using **Wisdom Panel Insights!** Knowing your dog's breeds is more than a novelty - it is a medical necessity. Each breed in your pooch's genetic paw print has unique health concerns you should know about so that you can provide a lifetime of excellent care.



We recommend discussing your dog's ancestry report with your veterinarian, as he or she can help you use your **Wisdom Panel Insights** report to help better care for Sage. The next time you visit your veterinarian, consider asking these questions in addition to any you come up with on your own:

- Are there any specific issues that may be relevant to my dog's well-being?
- Are there any special techniques that may help in training a dog with this particular mix?
- Are there any particular dietary considerations to bear in mind for a dog like mine?

HOW WISDOM PANEL INSIGHTS WORKS

The process started when you sent a sample to our laboratory, where the DNA was extracted from the cells and examined for the 321 markers that are used in the test. The results for these markers were sent to a computer, that evaluated them using a program designed to consider all of the pedigree trees that are possible in the last three generations. The trees considered include a simple pedigree with a single breed (a likely pure-bred dog), two different breeds at the parental level (a first-generation cross), all the way up to a complex tree with eight different great-grandparent breeds allowed.

Our computer used information from over 200 breeds and varieties from our breed database to fill these potential pedigrees. For each of the millions of combinations of ancestry trees built and considered, the computer gave each a score representing how well that selected combination of breeds matched to your dog's data. The pedigree with the overall best score is the one which is shown on the ancestry chart. Only breeds that reached our set confidence threshold for reporting are reported in the ancestry chart.

MORE BREED INFORMATION

Visit www.Genesis4Pets.com to find out more about your dog's health-care needs: you'll feel better knowing that you're doing everything you can to keep your pal happy and healthy. In addition to loads of free, easy-to-understand information based on the latest medical research, you will receive a 50% discount on all downloadable health-care booklets that explain the common health concerns for individual breeds. Simply enter promotional code **WISDOM** when you check out to receive your discount (expires 30 days after you receive your Wisdom Panel report).

Accessing your test status checker online also lets you view Mixed-Breed Genesis health reports provided by VetThink™ which are designed to assist you to take the best possible care of your dog throughout its life.

