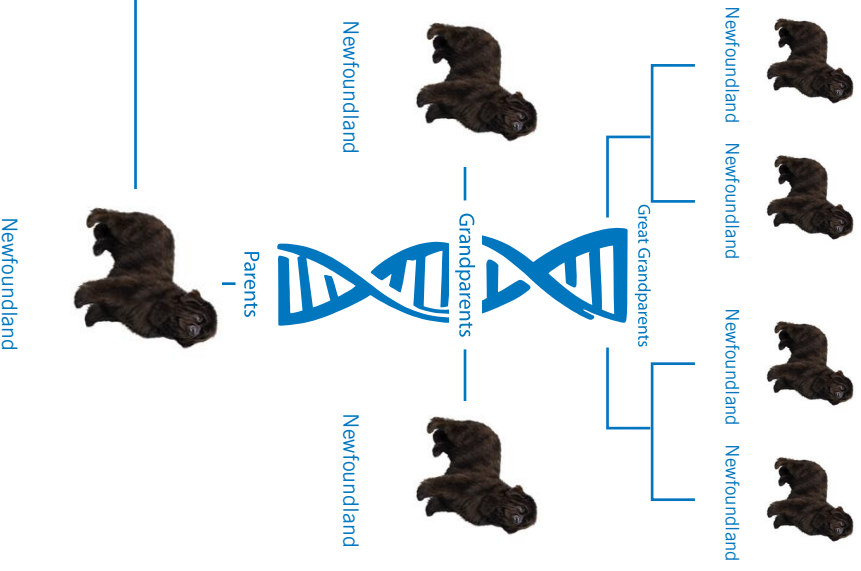


Indigo Sapphire Bear
Newfoundland



This certifies the authenticity of Indigo Sapphire Bear's canine genetic background as determined following careful analysis of more than 300 genetic markers using the **Wisdom Panel**® Purebred dog test. The ancestry shown is predicted to be the best match for Indigo Sapphire Bear's DNA data based on our proprietary computer analysis and extensive breed database.

Dog's name:
Indigo Sapphire Bear

DR. NEALE FRETWELL
R&D Director

January
11, 2013



P.O. Box 10786
Gaithersburg, MD 20898-0786
www.WisdomPanel.com

January 11, 2013

Dear Scott,

The **Wisdom Panel**® Purebred computer algorithms have performed a variety of analyses and Indigo Sapphire Bear's results are consistent with the purebred Newfoundland samples in the Wisdom Panel database.

This is due to the following observed results:

- In a Principal Component Analysis (PCA), Indigo Sapphire Bear's DNA sample appears within the Newfoundland cluster.
- In a PCA, Indigo Sapphire Bear's DNA sample appears within the Newfoundland cluster when also compared to an outgroup.
- In a PCA, Indigo Sapphire Bear's DNA sample appears within the Newfoundland cluster when compared to samples of the two next best matched breeds in the Wisdom Panel Ancestry analysis.
- The Newfoundland is detected as the sole predominant breed in a Wisdom Panel ancestry analysis.
- The Newfoundland is the top matching breed in a pairwise comparison analysis between Indigo Sapphire Bear's DNA data and all the purebred dogs in the Wisdom Panel database.
- The Newfoundland is detected most frequently in the top 20 best matched dogs in an individual pairwise comparison analysis with all of the nearly 10,000 dogs in the Wisdom Panel database.
- The observed homozygosity of Indigo Sapphire Bear's DNA data is within the expected range for this breed.

The following pages contain a detailed summary of the results of each of the separate tests performed on Indigo Sapphire Bear's DNA data.

Thank you for using the **Wisdom Panel**® Purebred test to discover if your dog has a profile consistent with a purebred Newfoundland. If you have any questions about the information enclosed, please contact our customer care team at customercare@marsveterinary.com.

Regards,

A handwritten signature in blue ink, appearing to read "Neale Fretwell".

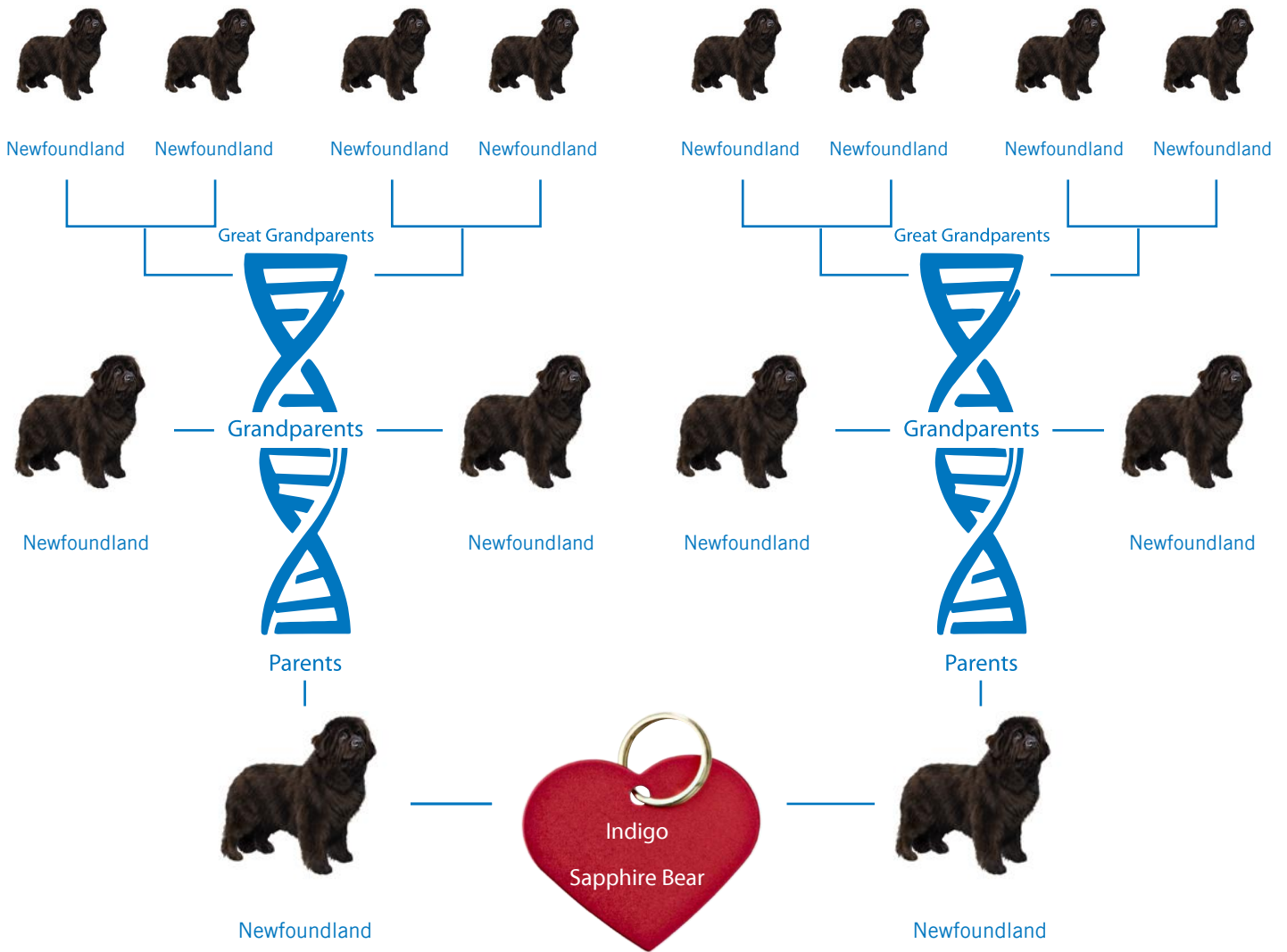
DR. NEALE FRETWELL

Research & Development Director



ANCESTRY CHART

The chart below summarizes the predicted last three generations of Indigo Sapphire Bear's ancestry based on the Wisdom Panel ancestry analyses performed on Indigo Sapphire Bear's DNA data. The data supports the observation that Indigo Sapphire Bear's genetic profile matches that of a purebred Newfoundland.



Newfoundland

More information regarding the purebred detected, as well as the tests performed on your dog's DNA sample, can be found on the following pages.

NEWFOUNDLAND



HEIGHT:

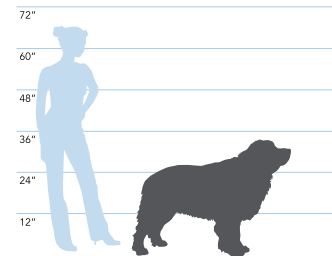
26 - 28 in

WEIGHT (SHOW):

100 - 152 lb

WEIGHT (PET):

86 - 163 lb



EARS



MUZZLE



TAIL



The Newfoundland breed originated on the East Coast of Canada and are affectionately referred to as “Newfies” or “Newfs.” The breed’s ancestors were likely brought to Newfoundland during the 1400’s by European sailors, although the exact lineage of the breed is highly debated. Many theorize that the European dogs were crossed with local dogs to establish the modern Newfoundland. Due to their exceptional swimming and water crossing skills, they have been called the “St. Bernard of the water” and were often used to pull fishnets and heavy equipment. Because of these skills, the breed was taken to Europe and put to use by fishermen. By the eighteenth century, the Newfoundland had established a reputation for itself as an accomplished all purpose water dog, lifeguard and draft animal. The Newfoundland Club was established in England over one hundred years ago and is one of the oldest breed clubs in that country. Most of the Newfoundlands in the United States and Canada are descendants of the dogs that were bred in England. The Newfoundland was recognized by the American Kennel Club in 1886.

The Newfoundland can be a variety of solid colors including black, black and tan, brown, gray, or beige with or without white markings. The landseer variety is predominantly white with patches of black, especially over the head and muzzle.



DO YOU RECOGNIZE ANY OF THESE NEWFOUNDLAND TRAITS IN INDIGO SAPPHIRE BEAR?

- Intelligent, hard working, calm, and usually friendly dogs.
- Good family dogs.

- Newfoundland dogs enjoy dog sports such as water trials, packing, weight pulling, musical freestyle, agility, tracking, and obedience.
- Because Newfoundlands are sensitive, they respond best to reward-based training.



STATEMENT OF AUTHENTICATION

Dog's name: **Indigo Sapphire Bear**

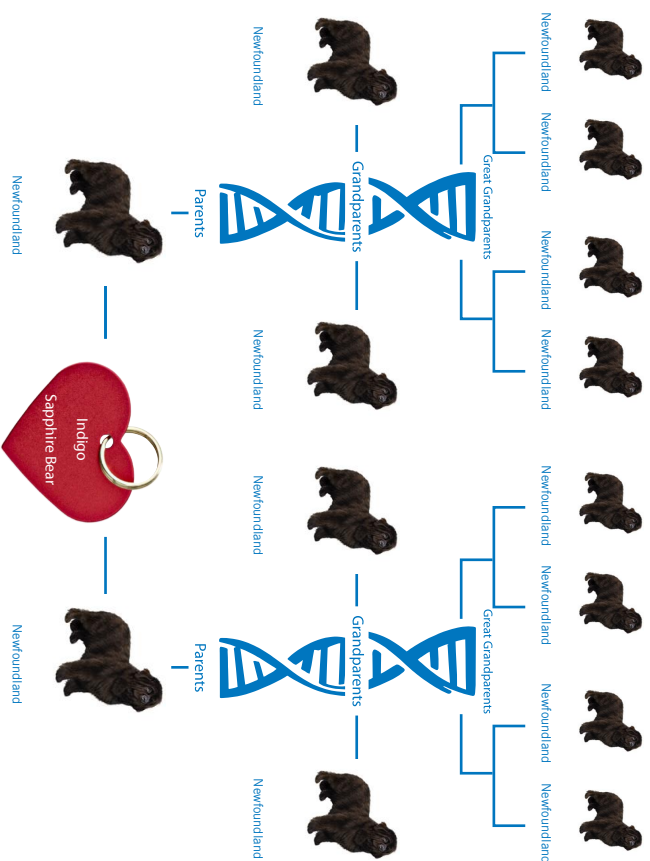
Owner's name: **Scott Hassler**

Date: **January 11, 2013**

This certifies the authenticity of Indigo Sapphire Bear's canine genetic background as determined following careful analysis of more than 300 genetic markers using the *Wisdom Panel*® Purebred dog test. The ancestry shown is predicted to be the best match for Indigo Sapphire Bear's DNA data based on our proprietary computer analysis and extensive breed database.

DR. NEALE FRETWELL

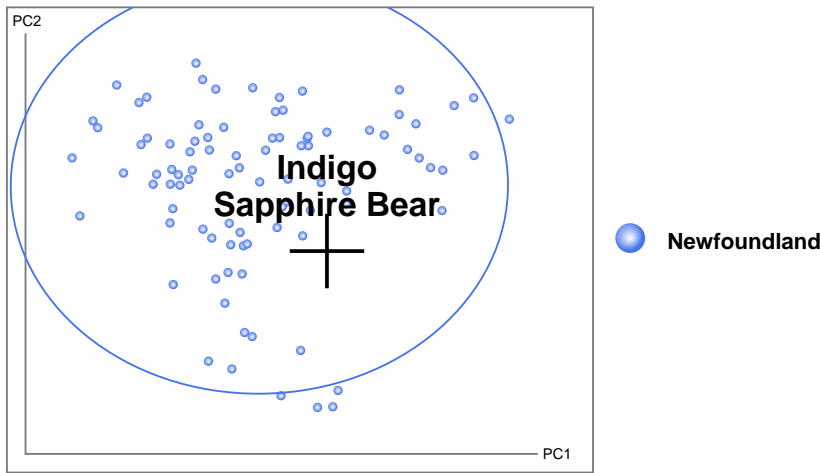
Research & Development Director



Newfoundland

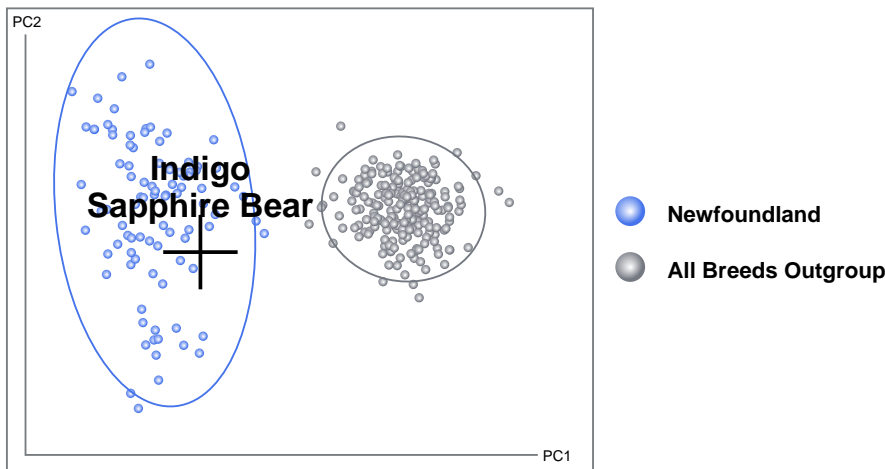
PCA Analysis of Indigo Sapphire Bear’s DNA sample and Newfoundland samples from the Wisdom Panel database:

Principle Component Analysis (PCA) allows us to see how similar samples are. Closely related samples, like dogs from the same breed, will be expected to be closer together than samples from other breeds. This tends to create a cluster of points for each breed or sub-population within a breed. If a sample is within the cluster for the breed, this is a very good indication that it is likely a pure member of this breed. The PCA below shows Indigo Sapphire Bear’s data compared to Newfoundland samples from the Wisdom Panel database. The sample falls within the Newfoundland cluster indicating that its genetic profile is consistent with other dogs from this breed.



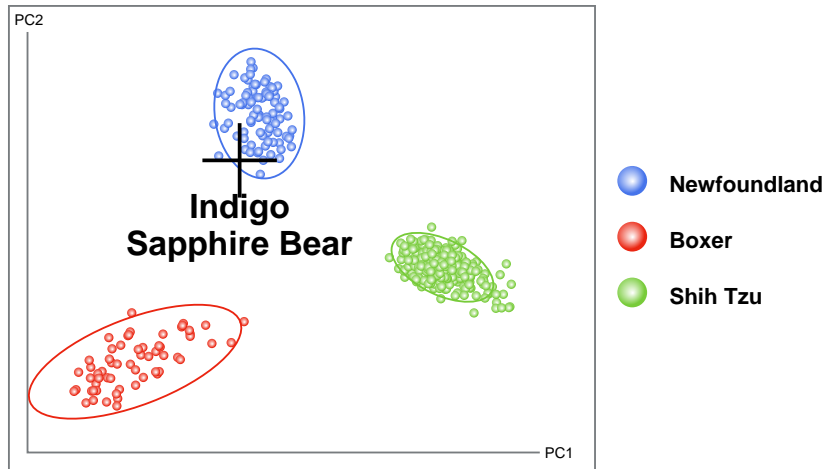
PCA Analysis of Indigo Sapphire Bear’s DNA data including Newfoundland samples and an All Breeds outgroup:

The PCA below shows Indigo Sapphire Bear’s data compared to samples of Newfoundland, as well as an All Breeds outgroup comprised of a single representative sample from the other breeds in the Wisdom Panel database. This is another means of verifying that Indigo Sapphire Bear’s data is more consistent with the Newfoundland than with any other breed and here the sample is clustering closely with the purebred Newfoundland cluster.



PCA Analysis of Indigo Sapphire Bear's DNA sample, Newfoundland and the two next closest matching breeds in the Wisdom Panel analysis:

The PCA below shows Indigo Sapphire Bear's data compared to Newfoundland samples, as well as samples of the next two best matched breeds from the Wisdom Panel Ancestry analysis. Indigo Sapphire Bear's DNA sample clusters tightly with the purebred Newfoundland cluster. This is what we would expect from a purebred Newfoundland.



Pairwise Comparison Testing for the Best Overall Breed Match:

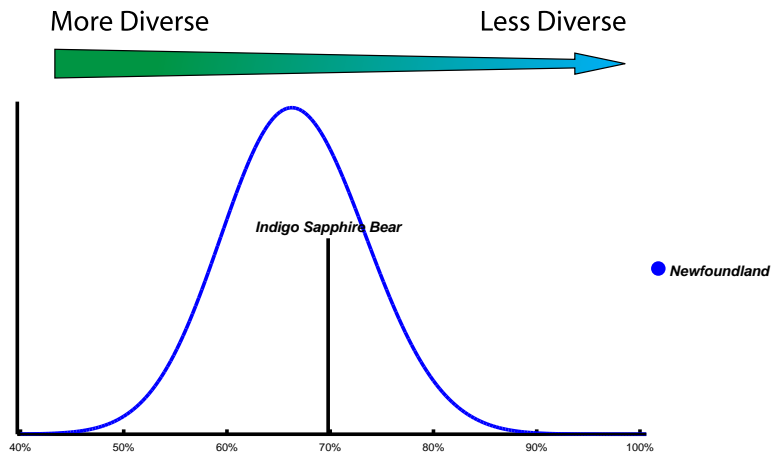
A pairwise comparison test was performed between Indigo Sapphire Bear's DNA data and that of each of nearly 10,000 dogs in the Wisdom Panel purebred dog database. In this analysis the top matching breed detected is the Newfoundland.

Pairwise Comparison Testing for Match to the Top 20 Database Samples:

A pairwise comparison test was performed between Indigo Sapphire Bear's DNA profile and that of each of nearly 10,000 dogs in the Wisdom Panel purebred dog database. Looking at individual samples, the Newfoundland occurred most often in the top 20 ranked sample matches in this analysis. This is what we would expect from a purebred Newfoundland.

Homozygosity Profile:

Homozygosity is a measure of how many of Indigo Sapphire Bear's genetic markers are identical because both the sire and dam passed down the same marker variant. Purebred dogs tend to have a higher homozygosity than most mixed breed dogs. Each breed within the Wisdom Panel database has a specific range of homozygosity scores. Indigo Sapphire Bear's homozygosity score falls within the range that is seen for purebred Newfoundland samples.



Further Information

You may wish to research more information regarding the breeds found in Indigo Sapphire Bear. The following links provide useful information into breed characteristics, training and health.

- The American Kennel Club (AKC) provides information on AKC registered and Foundation Stock Service breeds at www.akc.org.
- The United Kennel Club (UKC) has a range of information on UKC registered breeds at www.ukcdogs.com.
- The Kennel Club is the major British registry and their website contains information about the breeds they register at www.thekenelclub.org.uk.
- The free encyclopedia Wikipedia contains a range of information on most breeds, including breed histories, at www.wikipedia.org.
- The Dog Breed Info Center has information on most breeds at www.dogbreedinfo.com.
- The US Pedigree website provides information about dog breeds and many US breeders at www.pedigree.com.
- The Australian Pedigree website has a very detailed breed library which includes temperament and what breeds are like to live with at www.pedigree.com.au.
- The Wisdom Panel website contains additional information about the breeds, as well as our Photo Gallery at www.wisdompanel.com.

Breed standards may vary between registries and can result in ambiguity of breed traits, which may be acceptable with some registries but not others. Additionally, the requirements of registration may differ between registries. Please check with the specific kennel club or registry to determine their registration requirements.



THANK YOU FOR CHOOSING WISDOM PANEL PUREBRED TO CONFIRM YOUR DOG'S FAMILY ANCESTRY

Congratulations on taking the steps to confirm your dog's purebred ancestry. We hope the information in this report has been insightful.

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).

We recommend discussing your dog's ancestry report with your veterinarian, as he or she can help you use your Wisdom Panel Purebred report to help better care for Indigo Sapphire Bear. 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 breed?
- Are there any particular dietary considerations to bear in mind for a dog like mine?

BECAUSE YOU LOVE YOUR DOG - SHARE HIS STORY!

Join our online community of mixed-breed dog owners and share your dog's Wisdom Panel Purebred report with the world. On our website you can:

- Register your dog and upload photos into our Wisdom Panel photo gallery
- Get help to show off your dog's breed profile on your blog, Dogster page, Facebook and MySpace profiles

Visit wisdompanel.com and use the details below to create your dog's profile:

Owner Name: Scott Hassler

Test Report Code: 4500004283

MORE INSIGHT

Learning more about the history of the Newfoundland can help you and your Veterinarian better train, feed and care for your dog. Visit our online Breed Library at wisdompanel.com.

Accessing your test status checker online also lets you view Generic Size-based Genesis health reports provided by VetThink™ which are designed to assist you to take the best possible care of your dog throughout its life. Genesis also offer breed-specific information guides.



TERMS AND CONDITIONS:

Each dog is unique and their physical and behavioral traits will be the result of multiple factors, including genetics, training, handling, and environment. **Wisdom Panel®** Purebred's proprietary genetic analysis provides insight into the behavioral traits in breeds that have been identified. **Wisdom Panel®** Purebred is designed and intended to be used solely to identify the genetic makeup of a dog's specific pure breed heritage and no other purpose is intended, authorized, or permitted.

Upon receipt of your sample, Mars Veterinary will analyze your dog's DNA to determine the pure breed heritage in your dog's ancestry with a reasonable degree of certainty. Mars Veterinary's testing procedures are designed to provide reliable and accurate results.

Wisdom Panel® Purebred is based upon the Mars Veterinary database of validated breeds and intended for use on purebred dogs. The test was designed specifically to evaluate the purity of a purebred dog by explaining how closely your dog's genetic profile matches with the selected pure breeds in our database. Mars Veterinary is not responsible for any errors in obtaining the swab sample or for any injuries or loss that may occur as a result.

In the unlikely event that it is not possible to determine breed history or that an error in the analysis occurs, liability by Mars Veterinary or related companies and individuals is disclaimed and damages in any event are limited to the payment actually received by Mars Veterinary for the individual specified analysis at issue.

Many cities and communities have breed-specific ordinances and laws that may require special handling or prohibit the ownership of some dogs with a particular breed in their genetic background. Neither Mars Veterinary nor any related company is responsible for compliance or notification regarding these matters. You may want to check with your local authorities to determine if your dog's genetic profile requires compliance with any laws, regulations, or ordinances in your area.