

Coat Color and Trait Certificate

Call Name:	Pippa	Laboratory #:	60944
Registered Name:	-	Registration #:	-
Breed:	Labradoodle	Microchip #:	0C00161726
Sex:	Female	Certificate Date:	Sept. 26, 2017
DOB:	Aug. 2017		

This canine's DNA showed the following genotype(s):

Coat Color/Trait Test	Gene	Genotype	Interpretation
A Locus (Agouti)	<i>ASIP</i>	A^Y/a	Sable/fawn (carries bicolor/solid)
Cu Locus (Curly Hair)	<i>KRT71</i>	Cu^C/Cu^C	Curly coat
E Locus (Yellow/Red)	<i>MC1R</i>	E/e	Black (carries yellow/red)
IC Locus (Improper Coat/Furnishings)	<i>RSPO2</i>	F/F	Furnishings
K Locus (Dominant Black)	<i>CBD103</i>	K^B/k^Y	No agouti expression allowed (carrier)
L Locus (Long Hair)	<i>FGF5</i>	Lh/Lh	Longhaired
SD Locus (Shedding)	<i>MC5R</i>	SD/SD	High shedding

Interpretation:

This dog carries one copy of A^Y and one copy of a which results in a sable/fawn coat color. However, this dog's coat color is also dependent on the E, K, and B genes. The sable/fawn coat color is only expressed if the dog is also E/E or E/e at the E locus and k^Y/k^Y at the K locus which allows for agouti gene expression. This dog will pass on A^Y to 50% of its offspring and a to 50% of its offspring.

This dog carries two copies of Cu^C which results in a curly coat. However, the overall coat type of this dog is dependent on the combination of Cu of this dog's genotypes at the L, Cu, and IC loci. This dog will pass Cu^C on to 100% of its offspring.

This dog carries one copy of E and one copy of e which allows for the production of black pigment. However, this dog's coat color is also dependent on the K, A, and B genes. This dog will pass E on to 50% of its offspring and e to 50% of its offspring, which can produce a yellow/red coat (including shades of white, cream, yellow, apricot or red) if inherited with another copy of e .

This dog does not carry the mutation for improper coat and will therefore have furnishings (proper coat). However, the overall coat type of this dog is dependent on the combination of this dog's genotypes at the L, Cu, and IC loci. This dog will pass F (furnishings, proper coat) on to 100% of its offspring.

This dog carries one copy of K^B and one copy of k^Y which prevents expression of the agouti gene (A locus) and allows for solid eumelanin (black pigment) production in pigmented areas of the dog. However, this dog's coat color is also dependent on its genotypes at the E and B genes. This dog will pass on K^B to 50% of its offspring and k^Y to 50% of its offspring.

This dog carries two copies of Lh which results in long hair. However, the overall coat type of this dog is dependent on the combination of this dog's genotypes at the L, Cu, and IC loci. This dog will pass Lh on to 100%

of its offspring.

This dog carries two copies of **SD** which has been associated with higher shedding. However, the overall degree of shedding for this dog is dependent on the combination of this dog's genotypes at the SD and IC loci. This dog will pass **SD** on to 100% of its offspring.

Paw Print Genetics® has genetic counseling available to you at no additional charge to answer any questions about these test results, their implications and potential outcomes in breeding this dog.

**Note: At the client's request, this certificate was amended on September 26, 2017 to update the call name for this dog.*



Helen F Smith, PhD
Assistant Laboratory Director



Casey R Carl, DVM
Associate Medical Director

Normal results do not exclude inherited mutations not tested in these or other genes that may cause medical problems or may be passed on to offspring. These tests were developed and their performance determined by Paw Print Genetics®. This laboratory has established and verified the tests' accuracy and precision. Because all tests performed are DNA-based, rare genomic variations may interfere with the performance of some tests producing false results. If you think these results are in error, please contact the laboratory immediately for further evaluation. In the event of a valid dispute of results claim, Paw Print Genetics will do its best to resolve such a claim to the customer's satisfaction. If no resolution is possible after investigation by Paw Print Genetics with the cooperation of the customer, the extent of the customer's sole remedy is a refund of the fee paid. In no event shall Paw Print Genetics be liable for indirect, consequential or incidental damages of any kind. Any claim must be asserted within 60 days of the report of the test results.