



Coat Color DNA Test

Case Number: 113575

Owner: David Wolcott
3055 Daisy Road
Woodbine MD 21797

Canine Information

DNA ID Number: **159732**

Call Name: **Tommy**

Sex: **Male**

Birthdate: **10/30/2015**

Breed: **Labrador Retriever**

Coat Color: **Black**

Registered Name: **Hillcrest Tomahawk QA2**

Registration Number: **SR90450708**

Microchip/Tattoo: **985112006106387**

Report Date: 8/9/2018

DNA Result: **EE R306ter -/-**

BB S41C -/-, Q331X -/-, 345delP -/-

DD C.22G>A -/-

These results are based on data obtained from analysis of unique DNA loci in accordance with the standards and protocols set forth by DDC Veterinary. The accuracy of the result is based on the information and the quality of samples provided by the client. DDC Veterinary does not assume responsibility of errors due to mislabeled or incorrectly sampled submissions.


Matt Shaunessy, Senior Scientist



This supplemental sheet can be used as a guide to help clients better understand their DNA Coat Color results.

More comprehensive information about DNA Color testing can be found at our webpage:

<http://www.vetdnacenter.com/canine-dna-coat-color.html>

BB	S41C -/-, Q331X -/-, 345delP -/-	(does not carry brown)
Bb	S41C +/-, Q331X -/-, 345delP -/-	(brown carrier)
Bb	S41C -/-, Q331X +/-, 345delP -/-	(brown carrier)
Bb	S41C -/-, Q331X -/-, 345delP +/-	brown carrier)
Bb ₂	S41C +/-, Q331X -/-, 345delP +/-	(carries 2 copies of brown alleles)
bb	S41C , Q331X , 345delP	(brown phenotype; 2 or more SNPs detected)

*Please note that brown color is also commonly referred to as “liver” or “chocolate” and occasionally “red” in a few breeds as well.

EE	R306ter	-/-	(does not carry yellow)
Ee	R306ter	+/-	(yellow carrier)
ee	R306ter	+/+	(yellow phenotype)

*Please note that yellow color in Labrador Retrievers can be interpreted differently in other breeds. The phenotype could include a number of lighter colors described by breeders as cream, white, clear red, red, or apricot.

DD	C.22G>A	-/-	(does not carry dilution)
Dd	C.22G>A	+/-	(dilute carrier)
dd	C.22G>A	+/+	(dilute phenotype)

E ^M E ^M	M264V	+/+	(2 copies of dominant mask allele)
E ^M E ^x	M264V	+/-	(1 copy of dominant mask allele & 1 copy of recessive non-mask allele)
E ^E E ^x	M264V	-/-	(2 copies of recessive non-mask allele)

NN	spot SINE	-/-	(2 copies of the non-piebald allele)
NS	spot SINE	+/-	(1 copy of the non-piebald allele and 1 copy of the piebald allele)
SS	spot SINE	+/+	(2 copies of the piebald allele)

K ^B K ^B	G23del	+/+	(2 copies of dominant allele)
K ^B K ^y	G23del	+/-	(1 copy of dominant allele & 1 copy of recessive allele)
K ^y K ^y	G23del	-/-	(2 copies of recessive allele)

a ^y a ^y	A82S	+/+	(2 copies of fawn/sable allele)
a ^y a ^w	A82S	+/-	(1 copy of fawn/sable allele & 1 copy of non-fawn/sable allele)
a ^w a ^w	A82S	-/-	(2 copies of non- fawn/sable allele)

aa	R96C	+/+	(2 copies of recessive black allele)
aa ^x	R96C	+/-	(1 copy of recessive black allele & 1 copy of non-recessive black allele)
a ^x a ^x	R96C	-/-	(2 copies of non-recessive black allele)

a ^w a ^w	tan SINE	-/-	(2 copies of the non-tan point allele)
a ^w a ^t	tan SINE	+/-	(1 copy of the non-tan point allele and 1 copy of the tan point allele)
a ^t a ^t	tan SINE	+/+	(2 copies of the tan point allele)

NN	PSMB7:c.146T>G	-/-	(does not carry harlequin)
NH	PSMB7:c.146T>G	+/-	(1 copy of the harlequin, harlequin is expressed if merle gene is also present)