DDC | Veterinary

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^ME^M	M264V	+/+	(2 copies of dominant mask allele)
E^ME^x	M264V	+/-	(1 copy of dominant mask allele & 1 copy of recessive non-mask allele)
E^xE^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^BK^B	G23del	+/+	(2 copies of dominant allele)
K^BK^y	G23del	+/-	(1 copy of dominant allele & 1 copy of recessive allele)
K^yK^y	G23del	-/-	(2 copies of recessive allele)
a^ya^y	A82S	+/+	(2 copies of fawn/sable allele)
a^ya^w	A82S	+/-	(1 copy of fawn/sable allele & 1 copy of non-fawn/sable allele)
a^wa^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^xa^x	R96C	-/-	(2 copies of non-recessive black allele)
a^wa^w	tan SINE	-/-	(2 copies of the non-tan point allele)
a^wa^t	tan SINE	+/-	(1 copy of the non-tan point allele and 1 copy of the tan point allele)
a^ta^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)