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)**