

# DNA Test Report

## Coat Color

Genetic Trait	Gene	Variant	Copies	Result
Fawn	ASIP	a <sup>y</sup>	0	No effect
Recessive Black	ASIP	a	0	No effect
Tan Points	ASIP	a <sup>t</sup>	2	<b>Tan points possible</b>
Dominant Black	CBD103	K <sup>B</sup>	1	<b>Black or brindle possible</b>
Mask	MC1R	E <sup>m</sup>	1	<b>Dark Muzzle possible</b>
Recessive Red (Variant 1)	MC1R	e <sup>1</sup>	0	No effect
Recessive Red (Variant 2)	MC1R	e <sup>2</sup>	0	No effect
Recessive Red (Variant 3)	MC1R	e <sup>3</sup>	0	No effect
Widow's Peak (Discovered in Ancient dogs)	MC1R	e <sup>A</sup>	0	No effect
Widow's Peak (Discovered in the Afghan Hound and Saluki)	MC1R	E <sup>G</sup>	0	No effect
Red Intensity	MFSD12	i	0	White to yellow coat shades unlikely
Dilution (Variant 1) Linkage test	MLPH	d <sup>1</sup>	0	No effect
Dilution (Variant 2)	MLPH	d <sup>2</sup>	0	No effect
Dilution (Variant 3)	MLPH	d <sup>3</sup>	0	No effect
Chocolate (Variant 1)	TYRP1	b <sup>c</sup>	0	No effect
Chocolate (Variant 2)	TYRP1	b <sup>s</sup>	1	<b>Black features likely, chocolate possible</b>
Chocolate (Variant 3)	TYRP1	b <sup>d</sup>	0	No effect
Chocolate (Variant 4)	TYRP1	b <sup>asd</sup>	0	No effect

## Coat Patterns

Genetic Trait	Gene	Variant	Copies	Result
Piebald	MITF	s <sup>p</sup>	0	No effect

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## Coat Patterns (continued)

Genetic Trait	Gene	Variant	Copies	Result
Merle	PMEL	M	0	No effect
Harlequin	PSMB7	H	0	No effect
Saddle Tan	RALY	-	0	No effect

## Coat Length and Curl

Genetic Trait	Gene	Variant	Copies	Result
Long Hair (Variant 1)	FGF5	lh <sup>1</sup>	1	Short coat likely, long coat possible
Long Hair (Variant 2)	FGF5	lh <sup>2</sup>	0	No effect
Long Hair (Variant 3)	FGF5	lh <sup>3</sup>	0	No effect
Long Hair (Variant 4)	FGF5	lh <sup>4</sup>	0	No effect
Long Hair (Variant 5)	FGF5	lh <sup>5</sup>	0	No effect
Curly Coat	KRT71	C	0	No effect

## Hairlessness

Genetic Trait	Gene	Variant	Copies	Result
Hairlessness (Discovered in the Chinese Crested Dog) Linkage test	FOXI3	Hr <sup>cc</sup>	0	No effect
Hairlessness (Discovered in the American Hairless Terrier)	SGK3	hr <sup>ah</sup>	0	No effect
Hairlessness (Discovered in the Scottish Deerhound)	SKG3	hr <sup>sd</sup>	0	No effect

## Shedding

Genetic Trait	Gene	Variant	Copies	Result
Reduced Shedding	MC5R	sd	0	Seasonal shedder

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## More Coat Traits

Genetic Trait	Gene	Variant	Copies	Result
Hair Ridge	FGF3, FGF4, FGF19, ORAOV1	R	0	No effect
Furnishings	RSPO2	F	0	No effect
Albino	SLC45A2	c <sup>al</sup>	0	No effect

## Head Shape

Genetic Trait	Gene	Variant	Copies	Result
Short Snout (Variant 2)	BMP3	-	0	No effect
Short Snout (Variant 1)	SMOC2	-	0	No effect

## Eye Color

Genetic Trait	Gene	Variant	Copies	Result
Blue Eyes	ALX4	-	0	No effect

## Ears

Genetic Trait	Gene	Variant	Copies	Result
Floppy Ears	MSRB3	-	0	Pricked ears more likely

## Extra Toes

Genetic Trait	Gene	Variant	Copies	Result
Hind Dewclaws (Discovered in Asian breeds)	LMBR1	DC-1	0	No effect
Hind Dewclaws (Discovered in Western breeds)	LMBR1	DC-2	1	Hind dewclaws possible