





Explore the genetics behind Rosie's appearance and size.



Base Coat Color

A number of genes are known to affect coat color in dogs. They all interact and in some cases other, often unknown, genetic effects may also influence color and pattern.

The base coat color genes are linked to whether your dog will have any dark fur at all and, if they do, whether that dark fur is black, brown, grey, or light brown.

	Expand all
Dark or Light Fur Light colored fur (cream to red)	~
Dark brown pigment No impact on skin color	~
Red Pigment Intensity Any pigmented fur likely yellow or tan	Linkage Test

Brown or Black Pigment

Likely black colored nose/feet

Color Dilution

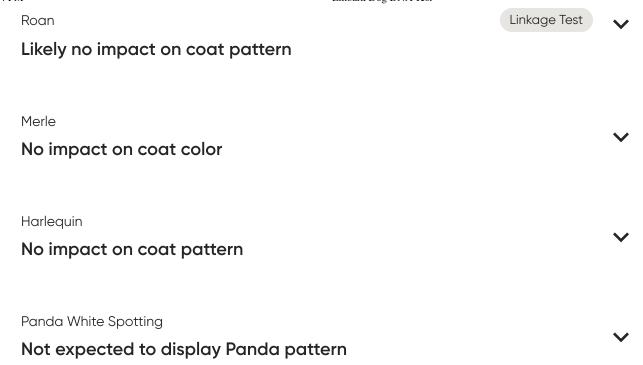
Dark (non-dilute) skin

Coat Color Modifiers

A number of genes are known to affect coat color in dogs. They all interact and in some cases other, often unknown, genetic effects may also influence color and pattern.

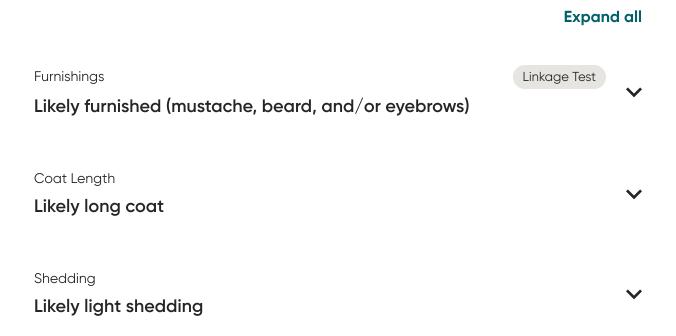
The coat color modifier genes we test for explain the fur patterns in most dogs. We cannot yet test for some color patterns, for example, some kinds of spotting.

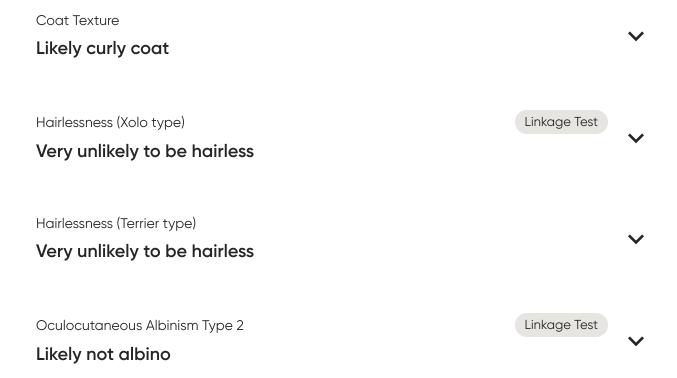
	Expand all
Hidden Patterning No impact on coat color	~
Body Pattern No impact on coat pattern	~
Facial Fur Pattern No dark fur anywhere	~
Saddle Tan No impact on coat pattern	~
White Spotting Likely to have some white areas in coat	~



Other Coat Traits

Furnishings, shedding, and curls are all genetic. Several genes are at work here, and they all interact. In fact, the combination of these genes explains the coat traits of 90 percent of AKC registered dog breeds.

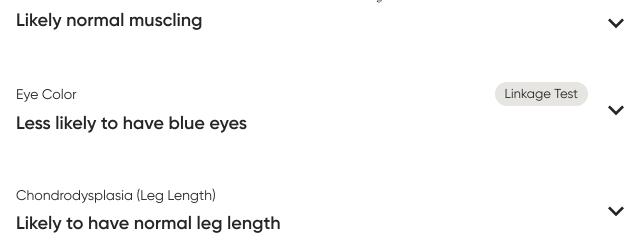




Other Body Features

We are discovering the genetic basis for an increasing number of other body features, including hind dew claws and the shape of your dog's head. Take our surveys to help us make new discoveries.

	Expand all
Muzzle Length Likely medium or long muzzle	~
Tail Length Likely normal-length tail	~
Hind Dew Claws Unlikely to have hind dew claws	~
Back Muscling & Bulk (Large Breed)	



Body Size

Body size is a complex trait that is affected by both genetic and environmental variation. Our genetic analysis includes genes that, together, explain over 85 percent of the variation in dog body size. Below are your dog's results for some of the most important size-related genes.

	Expand all
Predicted Adult Weight 47 lbs	~
Body Size 1 Intermediate	~
Body Size 2 Larger	~
Body Size 3 Smaller	~



Performance

Physical performance traits are interesting for all dogs, especially those that want to perform in more strenuous environments. These traits also shed light on the history of dogs and what they have been bred for. For example, the high altitude mutation we test for causes similar changes in oxygen usage as a mutation found in people from the Himalayas!

