



Doodle Coat Genetics Reference

Two genomes, not one - what the Poodle side contributes, and what a standard panel can miss

Which Parent Usually Contributes What

Trait	Typical source	Standard panel?
Black / brown base (B, E loci)	Both sides carry real alleles regardless of the visible coat.	Yes, test both parents
Red / apricot depth (shade)	Polygenic (KITLG-linked) - Poodle side dominates when the other breed is fixed ee.	E on/off: yes. Shade: no
Tan-point / phantom (A locus)	Poodle side is the variable one - some breeds carry a near-fixed pattern.	Yes
Solid-masking (K locus, KB)	Poodle side is highly variable - one KB copy from either parent masks it.	Yes
Parti / white spotting (S, spsp)	Poodle side - not documented in Labrador Retriever genetics.	Yes
Brindle (K-locus duplication, kbr)	Poodle side - real and AKC-registerable, not one defined mutation.	Usually not flagged - reads as plain KB/ky

Reading the Panel Across Breeds

- Notation is not universal - the same letter can mean opposite things between labs, or even between two tests at the same lab.
- Furnishings (RSPO2) is solid enough to breed on - one copy is dominant. Curl (KRT71) does not sort the same way in crosses - record it, never price on it.
- A generation label (F1, F1b, F2, multigen) is a pedigree average, not a genotype - littermates with the identical label can differ at B, D and S.
- Grizzle (eG, E locus) is real but undocumented in poodles or common doodle-parent breeds - only in sighthounds, a reminder no E/e panel covers every allele.

Not on this card: merle

Merle risk in a doodle cross is covered on the Merle Health Risk Chart - check it first.

BEFORE TRUSTING A DOODLE COAT PANEL

- Test both parents - a solid-looking non-poodle parent can carry masked alleles too.
- Confirm which lab and test produced each result - the same letter can mean opposite genotypes.
- Visible brindle striping with a KB/ky result is the tell, not a contradiction to explain away.

THE POODLE GENETICS LAB REFERENCE SET

E & B Loci - Merle Health Risk - Phantom Matrix - Silver & Blue - Parti Planner - Full Loci Card
Full guides, the calculator and sources at poodlegenetics.com/genetics-guide