WHAT BREEDS MAKE UP FRANKIE?

The Wisdom Panel® Insights™ computer algorithm performed over seven million calculations using 11 different models (from a single breed to complex combinations of breeds) to predict the most likely combination of pure and mixed breed dogs in the last 3 ancestral generations that best fit the DNA marker pattern observed in Frankie. The ancestry chart depicting the best statistical result of this analysis is shown in the picture below.

Bearded Collie*  
Bearded Collie*  
Pug  
Pug  

Great Grandparents

Bearded Collie  
Pug  

Grandparents

Bearded Collie / Pug Cross  

Parents

Frankie

Bearded Collie / Pug Cross crossed with Mixed Breed

* Breed detected, however at a lower confidence. Such results are not included in accuracy calculations.

† Curious about the Mixed breed ancestry? Take a look at the next page!
WHAT DOES THE MIXED BREED ANCESTOR MEAN FOR MY DOG?

We have identified for you the 5 next best breed matches which appeared in the analysis of your dog's DNA. One or more of these breeds could have contributed to the genetic makeup of the ancestors indicated by the mixed breed icon. The breeds are listed by the relative strength of each result in our analysis with the most likely at the top of the list. There could also be a breed or breeds present in the mixed breed component that we cannot detect with our current database of purebred dogs.

<table>
<thead>
<tr>
<th>Breed</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catahoula Leopard Dog</td>
<td>19.42%</td>
</tr>
<tr>
<td>Beagle</td>
<td>12.82%</td>
</tr>
<tr>
<td>Collie</td>
<td>8.39%</td>
</tr>
<tr>
<td>Boykin Spaniel</td>
<td>6.87%</td>
</tr>
<tr>
<td>Schipperke</td>
<td>3.72%</td>
</tr>
</tbody>
</table>

HOW WISDOM PANEL INSIGHTS WORKS

The process started when you sent a sample to our laboratory, where the DNA was extracted from the cells and examined for the 321 markers that are used in the test. The results for these markers were sent to a computer, that evaluated them using a program designed to consider all of the pedigree trees that are possible in the last three generations. The trees considered include a simple pedigree with a single breed (a likely pure-bred dog), two different breeds at the parental level (a first-generation cross), all the way up to a complex tree with eight different great-grandparent breeds allowed.

Our computer used information from over 185 breeds from our breed database to fill these potential pedigrees. For each of the millions of combinations of ancestry trees built and considered, the computer gave each a score representing how well that selected combination of breeds matched to your dog’s data. The pedigree with the overall best score is the one which is shown on the ancestry chart. Only breeds that reached our set confidence threshold for reporting are reported in the ancestry chart.
PUG

Pugs are an ancient breed, dating back to the Shang Dynasty of China in the years 1766 through 1122 BC. They were kept as pets by Tibetan monks before being exported to Japan, and then later to Europe. In the late sixteenth and early seventeenth centuries, sailors of the Dutch East India Trading Company brought Pugs back with them to Holland. Shortly thereafter, the Pug became the official dog of the Dutch Royal family. Pugs soon became popular throughout Europe, particularly in England, Spain, Germany and France. Pugs accompanied William and Mary to the British throne in 1688 and Napoleon is believed to have used a Pug to deliver messages to his wife when she was imprisoned. Pugs became very popular in nineteenth century England as they were a favorite of Queen Victoria, who bred them whilst keeping them as pets. Pugs of that time were of the fawn or apricot color, but darker shades were introduced when an English aristocrat brought some back from China. Standards for the breed were established in the 1880’s and the Pug was recognized by the American Kennel Club in 1885.

The Pug generally comes in fawn or black, though the fawn varies from a pale cream to a more vibrant apricot color. There is also a silver variant. The pug generally has a contrasting black mask which sometimes includes black or shaded markings on the ears or forehead.

DO YOU RECOGNIZE ANY OF THESE PUG TRAITS IN FRANKIE?

- Active, playful, clever, and rambunctious dogs.
- Stubborn tendencies may be lessened by using reward-based training involving small treats and favorite toys.

- Pugs are usually good with children and often are friendly dogs.
- Need regular activity, however require less exercise than other breeds. Can participate in dog sports such as agility and rally or competitive obedience.
The Bearded Collie is a breed that dates back to eighteenth century Scotland. The term “collie” refers to all Scottish sheepdogs and the Bearded Collie is the offspring of two varieties of collies that descended from the Old English Sheepdog, the Komondor, the Polish Lowland Sheepdog, and a variety of sheepdogs native to Scotland. One of these variations was an older, smaller collie used in the Highlands of Scotland and the other was a larger collie that was used in the Lowlands. The modern standard for the Bearded Collie was developed in 1898, one year after the breed was first shown competitively in Edinburgh. Surprisingly, the breed almost became extinct in the early 1900's but was then re-established in 1944. In 1955, the British Bearded Collie Club was formed and importation of the breed into the United States began in the late 1950's. The first U.S. birth of a litter of Bearded Collies occurred in 1967 and the Bearded Collie received recognition from the American Kennel Club in 1976.

The Bearded Collie has a medium-length shaggy coat, which comes in black, blue (gray), brown, or fawn, with or without white markings. The white markings never cover the entire head, and may be as few as to just leave a small blaze on the chest. Black, tan or fawn markings are also possible.

DO YOU RECOGNIZE ANY OF THESE BEARDED COLLIE TRAITS IN FRANKIE?

- Intelligent, active, playful and usually friendly dogs, with a unique ability to bounce or leap straight up off the floor when greeting or when very excited.
- Bearded Collies respond well to reward-based training involving treats or favorite toys.
- Enjoy dog sports such as flyball, musical freestyle, herding, Frisbee, agility, tracking, and competitive obedience; as well as swimming and jogging.
- Herding children and chasing moving vehicles or wildlife may impair bonding.