Hair Texture

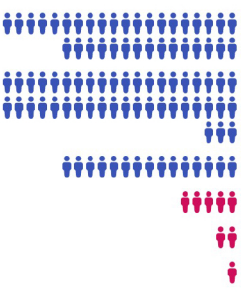
Curly hair follicles?

Scientists think the texture of your hair is created by the shape of your hair follicles. The curvier the follicle, the curlier the strand.

Your Traits Result

kary_mullis, the combination of your genetics and other factors makes you **most likely to have straight or wavy hair.**

Of 23andMe research participants with results like yours:



35% have straight hair.

43% have slightly wavy hair.

15% have wavy hair.

5% have big curls.

2% have small curls.

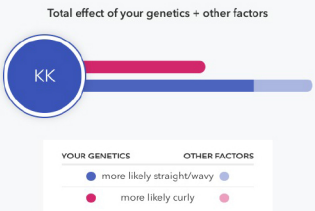
< 1% have very tight curls.

What texture is your hair?

How did we calculate your result?

We added up the effect of your genetic variants at 75 places in your DNA (genetic markers) plus the effect of other factors, including your age and sex.

Total effect of your genetics + other factors



Learn more about your genetic variants

Breakdown of your genetics

The bigger the circle, the stronger the effect your variants have on your overall chances.

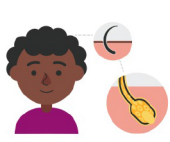
At 25 of the genetic markers we looked at you have variants that make you likely to have curlier hair, and at 28 you have variants that make you likely to have straighter hair. At 22 of the markers we looked at, you have variants with no effect either way (not shown).

See Scientific Details

More about hair texture

What gives your hair its texture?

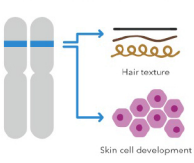
Curved hair follicles build curly hairs. How might that happen? The building blocks of hair are hair cells, which are linked together by a tough protein called keratin. As new hair cells are born at the bottom of a follicle, they get added onto the growing strand of hair. Some research suggests that the shape of the bottom of the hair follicle affects how these building blocks are put together.



Magnified cross-section of hair follicle

Genetics

23andMe research found 75 genetic markers associated with hair texture. Though we don't know exactly how all these markers may influence hair texture, many of them are linked to genes thought to be involved in hair follicle development. Interestingly, two of these genes, KRT71 and FGF5, have previously been associated with coat texture in dogs.



Keep exploring your Traits results.

Contribute

Join the research effort and contribute to new discoveries.

Compare

Compare your results to your family and friends.

Discuss

Join the discussion with other customers interested in Traits.

Hair Texture

Scientific Details

We use one of two different methods to calculate your trait results.

Statistical Model

Most traits are influenced by many different factors, including genetics, lifestyle, and environment. Usually, a statistical model using many factors provides better predictions than looking at single factors by themselves. To develop our models, we first identify genetic markers associated with a trait using data from tens of thousands of 23andMe customers who have consented to research. Then, we use statistical methods to generate a "score" for that trait using your genotype at the relevant genetic markers as well as your age and sex. We predict your likelihood of having different versions of the trait based on the survey responses of 23andMe customers with similar scores. These predictions apply best to customers who are of the same ethnicity as the people whose data contributed to the model. The accuracy of these predictions varies from trait to trait.

Read more about our statistical methodology

Curated Model

For some traits, just a few genetic markers can strongly predict whether a person will have a particular version of the trait. For curated models, we first evaluate published scientific studies to identify genetic markers with well-established associations with the trait. Then, we look at genetic and survey data from tens of thousands of 23andMe customers who have consented to research. We estimate your likelihood of having different versions of the trait based on survey responses from customers who are genetically similar to you at those markers. These results apply best to customers who are of the same ethnicity as the people whose data contributed to the predictions.

About your Hair Texture result

Your result for this trait was calculated using a **statistical model**.

About the Hair Texture model

Created based on customers of ethnicity: **European**

Number of customers used to create: **80,000**

Number of markers: **75**

Area Under Curve (AUC): **0.6**

Non-genetic factors: **Age, Sex**

Bin #	Straight	Slightly wavy	Wavy	Big curls	Small curls	Very tight curls
1	61.70%	31.34%	4.95%	1.34%	0.58%	0.10%
2	53.70%	36.26%	7.40%	1.63%	0.86%	0.14%
3	48.73%	38.59%	9.03%	2.33%	0.98%	0.34%
4	45.24%	40.23%	10.23%	2.62%	1.54%	0.14%
5	43.13%	41.16%	11.10%	2.98%	1.42%	0.22%
6	40.18%	41.40%	12.78%	3.53%	1.83%	0.29%
7	38.76%	41.91%	13.18%	3.91%	1.87%	0.36%
8	35.53%	42.69%	14.36%	5.04%	2.09%	0.29%
KK 9	34.66%	42.52%	15.49%	4.76%	2.23%	0.34%
10	30.75%	44.05%	16.84%	5.07%	2.91%	0.38%
11	30.67%	44.05%	16.67%	5.60%	2.57%	0.43%
12	27.89%	43.74%	18.40%	6.34%	3.03%	0.60%
13	28.08%	42.95%	18.71%	6.27%	3.29%	0.70%
14	24.12%	44.66%	19.94%	6.92%	3.65%	0.72%
15	22.22%	43.65%	21.57%	7.45%	4.23%	0.89%
16	19.84%	43.29%	21.55%	8.72%	5.31%	1.30%
17	19.07%	41.65%	23.76%	9.56%	4.90%	1.06%
18	16.81%	40.64%	25.03%	10.55%	5.62%	1.35%
19	13.64%	39.42%	25.75%	12.66%	6.89%	1.63%
20	9.06%	33.70%	29.21%	15.37%	10.35%	2.31%
Overall European	32.19%	40.89%	16.80%	6.13%	3.31%	0.68%

References

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9. Thibaut S et al. (2007). "Human hair keratin network and curvature." Int J Dermatol. 46 Suppl 1:7-10.

Change Log

Your report may occasionally be updated based on new information. This Change Log describes updates and revisions to this report.

Date	Change
Dec. 15, 2017	Hair Texture report updated with revised content and design.
June 22, 2017	Hair Curliness report separated from the Hair report.
Feb. 18, 2016	Due to improvements in data analysis, some customers may see an update to their Hair Curliness result in the Hair Texture report.
Oct. 21, 2015	Hair report created.