

Exploring Ancient Origins at MyHeritage  
compiled by Gail Burk from MyHeritage blog - - March 4, 2025

MyHeritage has announced the release of Ancient Origins, a major new product that complements their MyHeritage DNA ethnicity reports. Ancient Origins enables you to trace your origins up to 10,000 years into the past and discover the ancient populations from which you descend, such as Imperial Romans, Norse Vikings, Phoenicians, and Ancient Egyptians.

What is Ancient Origins? - - The Ancient Origins product is the result of a partnership between MyHeritage and Illustrative DNA, a startup company that is at the forefront of ancient ethnicity analysis. Ancient Origins complements MyHeritage DNA's Ethnicity Estimate, which provides a percentage breakdown of an individual's modern ethnic origins going back a few hundred years. Ancient Origins compares your DNA to ancient DNA samples uncovered in archeological excavations, and ancient populations from the Neolithic Period through the late Middle Ages.

How it works - - Ancient Origins is based on the latest developments in archaeogenetics, which is the study of ancient DNA. Advanced DNA extraction techniques that did not exist until recently enable scientists to analyze human samples excavated from archaeological sites around the world, date them, and extract DNA segments and genetic markers that are thousands of years old, or older. Using the location, time period, and additional archaeological evidence, researchers are able to associate samples with ancient civilizations. Many of these findings are published in scientific papers, and the samples are made publicly available.

The Ancient Origin reports at MyHeritage are generated using Principal Component Analysis (PCA), which is an approach used to measure genetic distances using multi-dimensional vectors. Subject to your consent, Ancient Origins first processes your raw DNA data to create a vector known as DeepAncestry Coordinates, which are derived by comparing your DNA data to a reference set of modern and ancient populations. The DeepAncestry Coordinates are then used anonymously to generate the Ancient Origin reports. The results are calculated based on your existing DNA results on MyHeritage, so there's no need to take a new test.

Reports - - Ancient Origins provides a set of detailed reports, which include a percentage breakdown of the ancient populations from which you descend in different historical eras; a breakdown of how much of your DNA traces back to populations of hunter-gatherers and early farmers; advanced reports that indicate one or more ancient populations that are closest to you genetically; and genetic distance maps visualizing your genetic proximity to ancient populations. These include ancient populations that are now extinct or that have

merged into other populations over time, such as Canaanites, Scythians, Visigoths, Etruscans, and many others. Also included are the Yellow River civilization, Ancient Egyptians, Ancient Greeks, Insular Celts, Ancient Bantus, Central Amerindians and Ashkenazi Jews of the Middle Ages. Ancient Origin reports are dynamic and will be updated periodically as more ancient DNA samples are added to the database, and as new scientific research papers are published with new findings on ancient DNA.

Before the reports can be generated, you'll need to consent to the processing of your DNA data to provide you with the Ancient Origin reports. Once you give your consent, you'll be asked to select an origin that best represents you. The algorithm behind the Ancient Origins Breakdown report is based on thousands of ancient DNA samples with known origins. Your input helps the algorithm focus on the most relevant reference samples and ancient populations. You can only select one such origin at a time. If you have one dominant ethnicity, select that ethnicity. If you don't have one dominant origin, or if you are unsure what to choose, select "Global."

The reports will be ready within 24 hours, but are usually ready sooner. You'll receive an email as soon as they're ready. When the reports are ready and you return to the Ancient Origins tab, you'll see an overview of the different reports.

Ancient Origins Breakdown - - Everyone has a genetic story that goes back thousands of years, and the Ancient Origins Breakdown is the first step to exploring that story. This report shows a percentage breakdown of the ancient populations from which you descend. The report includes a map that shows the geographical location of each ancient population. You can explore how your origins evolved across four historical eras: Bronze Age, Iron Age, Roman Era, and the Middle Ages. The results are influenced by the origin you selected before the results were generated.

You can click "Tailor the model" to change the selection to another region that may better represent your origins. A Genetic Fit score appears above the percentage breakdown (marked above in green). This score indicates how closely your DNA matches the ancient populations listed. A lower score means a closer match to the reference populations. As you review the results by historical era, the Genetic Fit score will be updated accordingly.

Click any population on the left panel or on the map to learn more about it. A panel will be displayed, providing more details including sub-populations, a description of the population, reference samples from the research, and links to scientific articles about the archaeological findings. Many of the ancient population descriptions also include a unique innovation added by MyHeritage: AI avatars that represent the population.

Hunter-Gatherer and Farmer Breakdown - - The Hunter-Gatherer and Farmer Breakdown indicates what percentage of your DNA traces back to early hunter-gatherer and farmer populations. As ancient populations transitioned from hunting and gathering to farming, distinct genetic and cultural lineages emerged. As a result, many people today carry traces of both hunter-gatherer and early farmer DNA.

Genetic Similarities Breakdown - - The Genetic Similarities Breakdown is an advanced report that enables you to better understand how closely your DNA compares to ancient populations through three different views: single origin, dual origin, and triple origin. Unlike the Ancient Origins Breakdown, which provides a report based on a tailored model of your choosing, the Genetic Similarities report compares your DNA to all of the reference populations in the database. The report shows the top 50 ancient populations, or population combinations, that are most similar to you genetically.

Click a population name to learn more about it. In addition to a description of the group, a table appears showing the genetic distance between this group and various modern populations. Dual origin reports show the ancient population combinations consisting of two populations that are most similar to you genetically. This view includes the same historical eras slider that appears in the Ancient Origins Breakdown. The Genetic Fit score of each model is displayed. Triple origin reports are very similar to the dual origin reports, but show models consisting of three ancient populations:

Genetic Distance Maps - - Genetic distance maps visualize your genetic proximity to different ancient populations. They are based on Principal Component Analysis (PCA; see above), which is a statistical method used to measure genetic distances. Each point on the plot represents a different ancient population or ancient sample, and they are clustered because of the genetic similarities between them. This view is fascinating because it not only shows which populations are closest to you genetically, but it also shows which populations are close to each other, and which ones are outliers. You will find that there is a lot of similarity between this and geography, because populations that lived next to each other often had cultural interactions and intermarried throughout history.

Sample Database - - For those who are interested in diving deeper into the research behind Ancient Origins, a reference encyclopedia is provided with the list of ancient DNA samples and populations used to develop the reports. It is comprehensive and includes populations and samples not yet represented in the reports. You can filter the database by sample type or location, and learn more about the origin of each population, including Y-DNA and mtDNA haplogroups.

Privacy - - In the development of the Ancient Origins product, careful efforts were invested to protect the privacy of MyHeritage users. Ancient Origins is an opt-in feature on MyHeritage, and explicit consent is required before results can be generated. Ancient Origins is based on MyHeritage's partnership with Illustrative DNA. At no time is your raw genetic data transferred to them. The only information that is passed on to Illustrative DNA is an anonymous vector called DeepAncestry Coordinates (see PCA above), which is immediately deleted by Illustrative DNA at the end of each session.

If you have opted in but later wish to opt out and delete your Ancient Origin reports, you can do so by selecting "Manage DNA kits" from the DNA menu. Then, click the three-dot menu next to the DNA kit, and select "Delete Ancient Origin reports."

Cost - - Ancient Origins is a premium feature on MyHeritage. A Complete or Omni subscription is required to receive the reports, which include periodic updates as new research emerges and new samples are added to the database. If you don't have one of these plans, you'll be offered a link to upgrade your account to receive the reports. If you already have a Complete or Omni subscription, or once your account is upgraded, you'll have the option to generate the Ancient Origin reports by clicking on "Get your Ancient Origin reports."

If you manage multiple DNA kits on MyHeritage, a Complete or Omni plan will give you access to Ancient Origins for all DNA kits that you manage. Many users are already eligible to receive the Ancient Origin reports at no extra cost through their existing subscription. Other users can upgrade to unlock Ancient Origins and many other valuable features for family history research and genetic genealogy. Ancient Origins is available on desktop and mobile web applications.

Source            MyHeritage  
<https://blog.myheritage.com/2025/02/introducing-ancient-origins-trace-your-origins-back-10000-years/>

YouTube video - - [https://youtu.be/LIRKBp\\_YUp4](https://youtu.be/LIRKBp_YUp4)