MyHeritage DNA Tools

MyHeritage has many DNA tools available to help you manage your matches and find your relatives. MyHeritage has many testers in their database from the U.S. and Europe.

You have two options for getting DNA results from MyHeritage.

1) Buy a MyHeritage DNA Test kit – this is a cheek swab kit

2) Upload results from another DNA testing company – Ancestry, 23andMe, or FamilyTree DNA

To get any DNA results from MyHeritage, you will need to create an account with MyHeritage. This requires an email address.

There are four sections to the DNA results from MyHeritage. You can click on any of the sections at the top of the page to easily access them.

Overview Ethnicity Estimate DNA Matches DNA Tools

Overview

This area contains an overview of ethnicity, matches, and locations of your matches. The overview of ethnicity contains the general locations for the highest percentages of your DNA. You can click on this for further details on your ethnicity.

Matches sort into close family, extended family, and distant relatives. The close family is immediate family to 1st cousins. The extended family are 1st cousins once removed to 2nd cousins once removed. The distant relatives are 3rd cousins or more distant cousins. The distant relatives will have the smallest amount of cMs (centimorgans) in common with you.

The locations allow you to see what countries your matches are from. DNA testing is very popular in the USA and a high number of the matches will probably be from the USA.

Ethnicity Estimates

These are **estimates** based on reference populations. The reference population is DNA from families that have been in a specific area for some time. Your DNA is compared to them to estimate how similar your DNA is to specific genetic characteristics for people in that region.

From the MyHeritage website: "Remember that your Ethnicity Estimates — which are the result of a highly accurate statistical algorithm — **are still estimates**. Some global populations exhibit similar DNA due to proximity and the mingling of populations."

You can click on each region to find out more about the history and people of that region.

The Ethnicity section also contains Genetic Groups. You can click on a Genetic Group to get more detail about it. Many of our ancestors migrated together. This shows you where your DNA is associated with many other people's DNA based on similar DNA being grouped together. These are a good indication of where in the world your ancestors may have migrated to.

Genetic groups have a confidence level setting. You can adjust this high, medium, or low. This is how confident the algorithm is that you are truly a part of these groups. It defaults to a medium confidence level.

Adjust the timing of the genetic group by sliding the slider bar at the bottom of the image to the left or right. As you scroll down on the left, you'll see common locations and surnames that may be helpful in your research.

<u>Matches</u>

This gets into the fun stuff. It's great to see how much you're related to people you may know, and you can connect with people you don't know who may help with those brick walls. This section starts with an overall list of your DNA matches. At the top, you are listed, and you can use the dropdown arrow next to your name to switch between you and other kits you manage. The kit name is listed next to your name and if you have uploaded multiple kits for the same person, you can access that from the kit name.

You can determine which matches you see in a couple of ways:

- Filter: Tree Details, Relationships, Locations, Labels
- Sort: Shared DNA (default), shared segments, largest segments, full name, most recent

Use these to make it easier to track/view your matches. Labels are particularly useful for tracking matches.

You can also search for a specific match. The 3 vertical dots bring up a good definition of "What are DNA matches?".

Next is reviewing a match. This gives you a lot of information about how you and that match compare to each other. This does depend on how much information that match and you have on MyHeritage.

MyHeritage tries to estimate how you are related to the match with a "Probable Relationship". When looking at a list of your matches, the probable relationship with the highest probability is the one shown. These are estimates and can be a helpful starting point for determining how you are related to a match. When reviewing a match, you can see the probabilities for all the possible relationships as well as a diagram that can help guide you to the most recent common ancestor (MRCA) with that match.

If a match has a large, well sourced, family tree, then it's more likely that you'll get additional information per match. Information such as a "Theory of Family Relativity", Shared Ancestral Surnames, Shared Ancestral Places, Shared Matches between Trees, and Pedigree Charts. This information can be useful in determining how you are related to a match.

You can use the label feature to group matches together to make it easier to keep track of matches you have already reviewed. You can add notes to matches as well to identify how you are related.

You can click on the triangulated segment tool to see what segments you have in common with a match and a shared match. This can help in identifying how you may be related to another match in your list. This is also one way to access the MyHeritage Chromosome Browser.

DNA Tools

This section includes 4 tools for evaluating your DNA matches: cM Explainer, Chromosome Browser, AutoClusters, and Ethnicity Maps.

cM Explainer

Per the MyHeritage website: A tool for suggesting how you might be related to a DNA Match based on the amount of shared DNA and ages.

With this tool, you can enter how much cM you share with someone and ages and this will estimate a relationship based on that information. The ages are optional. You can get a relationship purely on the amount of shared DNA you have with a match; however, you get much more accurate information if you can add ages into the tool.

This tool is based on cM Solver technology licensed from Larry Jones. MyHeritage also added an age algorithm to the cM Solver technology to get more accurate predicted relationships.

Chromosome Browser

In the Chromosome Browser you can compare what DNA you have in common with your matches and what DNA your matches have in common with each other.

If your matches have DNA in common with each other and with you, they show up as triangulated segments.

You can compare up to 7 of your matches. For triangulated segments you can change the cM size to eliminate or include smaller segments as needed.

At the bottom of the Chromosome Browser is segment information about your matches. This information can be used in 3rd party tools such as DNAPainter.

AutoClusters

This tool clusters your matches into groups likely descended from the same ancestor. You select a kit that you want to generate a report for and then it will email the information to you. The nice feature is it does have the matches for each cluster listed in a table. If you know how you are related to one match in that table, then you have a starting point for how you are related to the other matches in that table.

Make sure you read the ReadMe file that is generated to understand what was included and excluded in the report. There is a lower cM limit on the AutoClusters that often eliminates a large portion of your matches. The upper and lower cM limit are listed in the readme file.

Ethnicity Maps

Based on the data from MyHeritage DNA users, this tool shows you "the most common ethnicities in each country and the top countries for each ethnicity" according to MyHeritage. This is interesting to look at based on the DNA samples at MyHeritage which ethnicities have ended up where in the world.

Health Reports

You can now get a variety of health reports from MyHeritage based on your DNA. It does require that you have a MyHeritage DNA sample. This can't be done with uploaded kits. You'll have access to 48 health reports including 27 carrier status reports. It also includes access to a physician and genetic counselors to discuss your health results.

Manage DNA Kits

You can upload raw results from other vendors to MyHeritage. When you upload kits, **make sure you assign the results to the appropriate person**. Only assign DNA kits that you've taken to you, otherwise assign the DNA kit to the person who took the DNA test. It does not have to be a person in your tree.

From the Manage DNA Kits page, you can see the status of the kit, delete kits, assign a kit to another person, and view results for a kit.

Upload DNA data

If you've taken a test at another DNA company, you can download your raw data and upload it to MyHeritage. MyHeritage currently supports uploads from Ancestry, FamilyTreeDNA, and 23andMe. There are detailed instructions on the website for how to download your data from the other sites.

Resources:

MyHeritage Blog on DNA <u>https://blog.myheritage.com/category/dna/</u> MyHeritage – Everything you wanted to know about the MyHeritage DNA Test: <u>https://blog.myheritage.com/2021/11/myheritage-dna-everything-you-wanted-to-know-about-the-myheritage-dna-test/</u> DNA Painter: https://dnapainter.com/