What is a Haplogroup?

When you have your YDNA (which traces a direct paternal line) or mtDNA (which traces a direct maternal line) tested at Family Tree DNA (FTDNA), you receive two different kinds of information. You get a match list, and a haplogroup. Your match list contains the names of other individuals who have been tested who share enough DNA with you that FTDNA thinks they are worth your investigation.

Your haplogroup is a bonus.

Named with a dizzying array of letters and numbers, your haplogroup attempts to describe the deep ancestral history of your direct maternal or direct paternal line.

Let's dissect that word for a closer look. *Group* means just that, a set of individuals who share particular characteristics. *Haplo*, is short for haploid, and means single. This refers to the fact that we have a single copy (or version) of the YDNA and a single version of the mtDNA in our bodies. This is opposed to the other 22 sets of chromosomes, which are *diploid*, or two, because these chromosomes come in pairs (one from mom, one from dad).

Therefore, your haplogroup is like a club you belong to that can only be associated with the ancestors on one single direct line of inheritance. This club membership helps you define where in the world your direct line may have originated. It can also describe your affiliation with a particular special interest group (SIG) within your club that may help you answer some genealogical questions about the



Haplogroup badge.

origin of your ancestors.

Your membership dues are paid in single changes in your DNA that have accumulated over time. We call these single changes SNPs (snips). Just like donations to your club's account can be tracked to ensure you receive the benefits, each SNP has a time and a place stamp that lets us know when you have paid and which SIGs you may belong to.

The particular name of your haplogroup easily designates which club and which SIG you belong to. All haplogroups are named with an alternating number and letter pattern. The first letter tells us which club you are in, with all numbers and letters that follow acting like Russian nesting dolls, letting us know which SIG you are in. For example, in H2a3b we would say you are in club "H", in SIG within SIG "3" within SIG "a" within SIG "2". (Phew! And that was a short one!)

As you might expect, those who share your most detailed SIG are the most like you; you have the same interests.

You automatically receive the most detailed information possible about your mtDNA club membership when you order the mtDNA Full Sequence test at FTDNA. However, the YDNA haplogroup you receive from FTDNA is very high-level, not providing very much information about your SIGs on your paternal line.

The YDNA haplogroup R-M269 for example lists "R" as the club name and "M269" as the SIG. But there are hundreds of other SIGs under M269 (think of the nesting dolls again) that FTDNA does not test for you unless you pay an additional fee.

In general, your haplogroup might be able to tell you a general area in the world where you are from, but without additional testing and/or analysis, it likely will not be a shining beacon to direct your genealogical research, but more like a pretty badge to wear to your next genealogy conference.



Growing up with the budding genetic genealogy industry lead DIAHAN to her current position as Your DNA

Guide, where she provides personalized, interactive experiences to assist individuals and families in interpreting their genetic results in the context of their genealogical information. She is also the author of the Genealogy Gems DNA Quick Guides, available from the Your Genealogy Today store.