America's first genealogy driven DNA testing service

Family Tree DNA
HISTORY UNEARTHED DAILY

Understanding Haplogroups...

Genealogy by genetics is the greatest addition to Genealogy since the creation of the Family Tree!

What is a haplogroup?

One way to think about haplogroups is as major branches on the family tree of *Homo Sapiens*. These haplogroup branches characterize the early migrations of population groups. As a result, haplogroups are usually associated with a geographic region. If haplogroups are the branches of the tree then the haplotypes represent the leaves of the tree. All of the haplotypes that belong to a particular haplogroup are leaves on the same branch. Both mtDNA and Y-DNA tests provide haplogroup information, but remember that the haplogroups nomenclature are different for each.

Y-DNA haplogroups

A Y-DNA haplogroup is defined as all of the male descendants of the single person who first showed a particular SNP mutation. A SNP mutation identifies a group who share a common ancestor far back in time, since SNPs rarely mutate. Each member of a particular haplogroup has the same SNP mutation. For a single page graphic representation of the Y chromosome haplogroup tree, please see the haplotree.

mtDNA haplogroups

An mtDNA haplogroup is defined as all of the female descendants of the single person who first showed a particular polymorphism, or SNP mutation. Like Y-DNA SNP mutations, an mtDNA SNP mutation identifies a group who share a common ancestor far back in time.

How is my haplogroup determined?

Your haplogroup is automatically tested and confirmed for mtDNA tests. For Y-DNA tests, your haplogroup is predicted based on a large database that Family Tree DNA has for this purpose. The Y-DNA haplogroup database consists of the test results of participants in studies conducted and tested by Dr. Hammer at the University of Arizona.

Due to our high level of confidence in our prediction algorithm, most of the times a person will not be offered to order a confirmation test of their Haplogroup. However, on some occasions where we don't feel that a Haplogroup can be determined unambiguously without a test, the SNP test will be offered. For several haplogroups we can now offer Deep Clade tests, which can provide further information. To learn more, **click here**.

How are the haplogroups named?

The mtDNA and Y-DNA haplogroups are both named according to capitalized letters of the alphabet. Examples of mtDNA haplogroups include H, L2 and A. The mtDNA haplogroups are named as researchers differentiate different population groups.

Each of these major haplogroups, or clades, can have subgroups, or subclades. Subgroups have a numeric name which follows the haplogroup name. For example, haplogroup E has 3 subgroups called E1, E2, and E3. There is also a subgroup E* which belongs to haplogroup E but not any of the three defined subgroups. Subclades can also have subgroups, which are noted with lower-case characters, such as E3a or E3b.

The Y Chromosome Consortium (YCC) developed a naming system for the Y-DNA haplogroups designed to easily accommodate expansion as new groups are discovered. The YCC has defined 18 major haplogroups, called A through R, which represent the major divisions of human diversity based on SNPs on the Y-chromosome.

All Family Tree DNA explanations and terminology, including our haplogroup database, use the standard system developed by the YCC and defined in the YCC paper. The Y Chromosome Consortium scientific paper, which describes the Haplogroup naming system, can be found at the link below:

YCC Nomenclature System

For a single page graphic representation of the Y Chromosome Haplogroup tree, please see the **Haplotree**.

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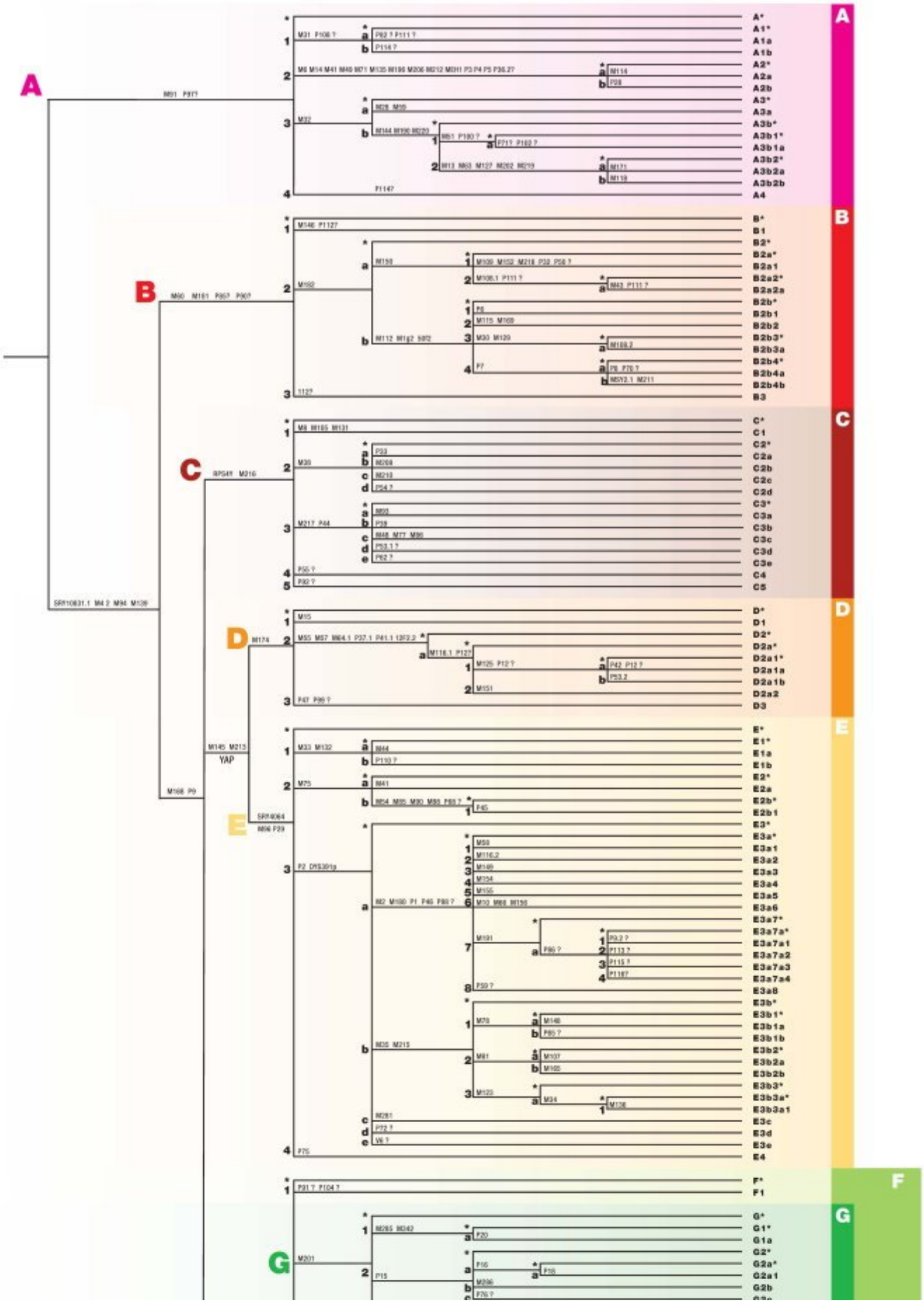
2005 Y-Chromosome Phylogenetic Tree



Haplogroup

The predicted results below compare your Family Tree DNA Y-DNA STR test with the world-wide database of **Dr. Hammer** and customers who have had their SNP tested by us. The comparative **Haplogroups** shown below were confirmed by SNP (Single Nucleotide Polymorphism) tests at Dr. Hammer's lab, which uses the **YCC nomenclature.** Haplogroups represent fractures in the tree and are tied to deep ancestry (think 10,000 or 10's of 1000's of years) and are shown in the human **Phylogenetic tree.** Please note that countries in this database are listed by the place one came from or currently lives. The value therefore is that it tells researches about migratory patterns, and gives information about the age of the 'group' of people -- after all, everyone on the tree that isn't in Haplogroup A and B have lived outside of Africa for at least 60,000 years - and the story is how you got where you live now.

"In studying the subject of DNA and human migration I had the opportunity to see the video and read the book: *The Journey of Man* by Spencer Wells. The **video** was very good, and the **book** was even better. In a word: Bravo! If you are interested in seeing or reading The Journey of Man follow the above links for your convenience, or visit or **"Books" page**".
Bennett Greenspan President & Founder, Family Tree DNA.

Haplogroup Test: your matches suggest that you belong to Haplogroup **R1b1c**, therefore you qualify to order our deep clade test which focuses on all mutations shown on the next screen after you click on the "Continue for more information" button. **Order** your Y-DNA SNP test for Deep Sub-clades.

Continue for more information

12 Marker Y-DNA Matches

Exact Matches

Haplogroup	Country	Comment	Count
R1b1	Denmark	-	1
R1b1c	England	-	1
R1b1c	Unknown Origin	-	1

One Step Mutations

Haplogroup	Country	Comment	Count
R1b1	England	-	2
R1b1	Germany	-	1
R1b1	Great Britain	-	1
R1b1	Ireland	-	1
R1b1	Italy	-	2
R1b1	Italy	Sardinia	1
R1b1	Italy	Sicily	1
R1b1	Polynesia	Polynesian (European admixture)	1
R1b1	Russia	-	1
R1b1	Scotland	-	2
R1b1	Shetland	-	1
R1b1	Spain	-	2
R1b1	Spain	Basque	1
R1b1	United Kingdom	-	1

R1b1	Unknown Origin	-	3
R1b1c	Germany	-	3
R1b1c	Ireland	-	3
R1b1c	Italy	-	1
R1b1c	Lithuania	-	1
R1b1c	Mexico	-	1
R1b1c	United Kingdom	-	1
R1b1c	Unknown Origin	-	7

Two Step Mutations

Haplogroup	Country	Comment	Count
R1b1	Austria	-	1
R1b1	Chile	-	1
R1b1	England	-	20
R1b1	France	-	5
R1b1	Germany	-	10
R1b1	Germany	Alsace	1
R1b1	Great Britain	-	2
R1b1	Iceland	-	4
R1b1	Ireland	-	9
R1b1	Polynesia	European admixture	2
R1b1	Russia	Ashkenazi	1
R1b1	Russia	Native Siberian	1
R1b1	Scotland	-	5
R1b1	Shetland	-	1
R1b1	Spain	-	5
R1b1	Sweden	-	3
R1b1	Switzerland	-	2
R1b1	United Kingdom	-	1
R1b1	Unknown Origin	-	40
R1b1	Wales	-	3
R1b1c	British Isles	-	2
R1b1c	Denmark	-	1
R1b1c	Dominican Republic	-	1
R1b1c	England	-	18
R1b1c	France	-	2
R1b1c	France	Ile-de-France	1
R1b1c	Germany	-	7
R1b1c	Great Britain	-	3
R1b1c	Ireland	-	14
R1b1c	Italy	-	4
R1b1c	Lithuania	-	1
R1b1c	Netherlands	-	2
R1b1c	Norway	-	2
R1b1c	Portugal	-	1
R1b1c	Scotland	-	5
R1b1c	Sicily	-	1
R1b1c	Spain	-	3
R1b1c	Switzerland	-	2

R1b1c	Ukraine	-	1
R1b1c	United Kingdom	-	4
R1b1c	Unknown Origin	-	23
R1b1c	Unknown Origin	European admixture	1
R1b1c	Wales	-	1
R1b1c4	Spain	-	1
R1b1c6	England	-	1
R1b1c6	Ireland	-	1

3 Step Mutations

Haplogroup	Country	Comment	Count
R1b	England	-	2
R1b	Scotland	-	1
R1b1	Austria	-	4
R1b1	Belarus	Ashkenazi	1
R1b1	British Isles	-	4
R1b1	Chile	-	1
R1b1	China	Chinese Muslim (Central Asian Descent)	1
R1b1	Denmark	-	3
R1b1	England	-	39
R1b1	England	Anglo-Celt	3
R1b1	England	Isle of Man	1
R1b1	France	-	10
R1b1	Germany	-	11
R1b1	Germany	Eifel District	1
R1b1	Great Britain	-	5
R1b1	Greece	-	1
R1b1	Hungary	-	2
R1b1	Iceland	-	11
R1b1	Ireland	-	20
R1b1	Isle of Man	-	1
R1b1	Italy	-	3
R1b1	Netherlands	-	3
R1b1	Netherlands	Ashkenazi-Levite	1
R1b1	Northern Ireland	-	1
R1b1	Norway	-	3
R1b1	Polynesia	European admixture	2
R1b1	Polynesia	Polynesian (European admixture)	1
R1b1	Portugal	-	3
R1b1	Puerto Rico	-	1
R1b1	Russia	-	4
R1b1	Scotland	-	17
R1b1	Shetland	-	7
R1b1	Slovakia	-	1
R1b1	Spain	-	7
R1b1	Spain	Andalusia	2
R1b1	Spain	Basque	1
R1b1	Switzerland	-	1

R1b1	United Kingdom	-	21
R1b1	Unknown Origin	-	99
R1b1	Wales	-	3
R1b1c	Africa	-	1
R1b1c	Azores	-	1
R1b1c	Belgium	-	2
R1b1c	British Isles	-	6
R1b1c	Colombia	-	1
R1b1c	England	-	30
R1b1c	France	-	6
R1b1c	Germany	-	12
R1b1c	Great Britain	-	3
R1b1c	Hungary	-	1
R1b1c	Ireland	-	23
R1b1c	Italy	-	3
R1b1c	Mexico	-	1
R1b1c	Netherlands	-	1
R1b1c	Northern Ireland	-	4
R1b1c	Norway	-	1
R1b1c	Puerto Rico	-	1
R1b1c	Russia	-	1
R1b1c	Scotland	-	21
R1b1c	Sicily	-	1
R1b1c	Slovakia	-	1
R1b1c	Spain	-	7
R1b1c	Sweden	-	3
R1b1c	Switzerland	-	1
R1b1c	United Kingdom	-	10
R1b1c	Unknown Origin	-	66
R1b1c	Wales	-	5
R1b1c6	England	-	1
R1b1c6	Scotland	-	1
R1b1c7	Ireland	-	1

4 Step Mutations

Haplogroup	Country	Comment	Count
N	Russia	Komi	1
R1	Germany	-	1
R1b	England	-	1
R1b	Germany	-	1
R1b	Unknown Origin	-	1
R1b1	Austria	-	1
R1b1	Austria-Hungary	Ashkenazi-Levite	2
R1b1	Belarus	Ashkenazi	1
R1b1	Belgium	-	2
R1b1	Bohemia	-	1
R1b1	British Isles	-	5
R1b1	Cameroon	Mandara	1
R1b1	China	Uygur (Central Asian origin)	2

R1b1	Colombia	-	1
R1b1	Czech Republic	-	1
R1b1	Denmark	-	5
R1b1	England	-	55
R1b1	England	Isle of Man	5
R1b1	England	Anglo-Celt	2
R1b1	England	Cornwall	1
R1b1	France	-	13
R1b1	Germany	-	21
R1b1	Germany	Ashkenazi	1
R1b1	Great Britain	-	1
R1b1	Greece	-	1
R1b1	Greece	Aegean Islands	1
R1b1	Hungary	-	1
R1b1	Iceland	-	8
R1b1	India	-	1
R1b1	Indonesia	Indonesian (European admixture)	1
R1b1	Ireland	-	27
R1b1	Italy	-	1
R1b1	Italy	Lombardy	1
R1b1	Japan	Japanese (European admixture)	1
R1b1	Netherlands	-	5
R1b1	Northern Ireland	-	3
R1b1	Norway	-	8
R1b1	Poland	-	5
R1b1	Polynesia	Polynesian (European admixture)	11
R1b1	Polynesia	European admixture	1
R1b1	Portugal	-	9
R1b1	Romania	-	1
R1b1	Russia	-	3
R1b1	Scotland	-	25
R1b1	Shetland	-	3
R1b1	Spain	-	7
R1b1	Spain	Catalunya	1
R1b1	Spain	Galicia	1
R1b1	Sweden	-	5
R1b1	Switzerland	-	6
R1b1	Syria	Arab	3
R1b1	Ukraine	-	2
R1b1	United Kingdom	-	24
R1b1	Unknown Origin	-	131
R1b1	Unknown Origin	Ashkenazi	2
R1b1	Wales	-	11
R1b1c	Africa	-	1
R1b1c	Belgium	-	2
R1b1c	Brazil	-	1
R1b1c	British Isles	-	2
R1b1c	Canary Islands	-	1
R1b1c	Czech Republic	-	1

R1b1c	Czechoslovakia	-	1
R1b1c	England	-	35
R1b1c	France	-	6
R1b1c	Germany	-	11
R1b1c	Great Britain	-	5
R1b1c	Hungary	-	1
R1b1c	Ireland	-	32
R1b1c	Italy	-	1
R1b1c	Macedonia	-	1
R1b1c	Netherlands	-	1
R1b1c	Northern Ireland	-	4
R1b1c	Poland	-	2
R1b1c	Portugal	-	1
R1b1c	Scotland	-	18
R1b1c	Sicily	-	1
R1b1c	Slovakia	-	2
R1b1c	Spain	-	8
R1b1c	Sweden	-	1
R1b1c	Sweden	Wermelia,	1
R1b1c	Switzerland	-	2
R1b1c	Ukraine	Ashkenazi	1
R1b1c	United Kingdom	-	12
R1b1c	Unknown Origin	-	85
R1b1c	Wales	-	2
R1b1c6	Germany	-	2
R1b1c6	Ireland	-	2
R1b1c6	Scotland	-	1
R1b1c6	Spain	-	1
R1b1c6	United Kingdom	-	2
R1b1c6	Unknown Origin	-	2
R1b1c7	Ireland	-	4
R1b1c7	Scotland	-	1
R1b1c7	Unknown Origin	-	1

Haplogroup Descriptions

N This haplogroup is distributed throughout Northern Eurasia. It is the most common Y-chromosome type in Uralic speakers (Finns and Native Siberian). This lineage most likely originated in northern China or Mongolia and then spread into Siberia where it became a very common line in western Siberia.

R1 The undifferentiated R1 lineage is quite rare. It is found only at very low frequencies in Europe, Central Asia, and South Asia. This lineage possibly originated in Europe and then migrated east into Asia.

R1b Haplogroup R1b is the most common haplogroup in European populations. It is believed to have expanded throughout Europe as humans re-colonized after the last glacial maximum 10-12 thousand years ago. This lineage is also the haplogroup containing the Atlantic modal haplotype.

R1b1 Haplogroup R1b1 is the most common haplogroup in European populations. It is believed to have expanded throughout Europe as humans re-colonized after the last glacial maximum 10-12 thousand years ago. This lineage is also the haplogroup containing the Atlantic modal haplotype.

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