



*John Doe*

## Premium Male DNA Ancestry Report

**Dxxxx-**

A sample of the Y-chromosome DNA was extracted, amplified and genotyped by our accredited testing laboratory. Chromosomes are the double-helix genetic structures by which hereditary information is physically transmitted from one generation to the next. The Y chromosome is passed only from a father to sons; its entire purpose is to determine maleness. Because of its stability over time, it is useful in tracing paternal ancestry (Jobling and Smith 2003). The allele values or STR markers for 16 loci or specific regions on your DNA were reported as follows on a separate page.

According to haplotype prediction, the haplogroup is R1b. The haplotype is most commonly reported as Western European. The subject very closely matches a modal haplotype of R1b identified as Wales/Briton.

In [YHRD.org](http://YHRD.org) there were 597 matches out of 285,406 clients in the data base. Among the absolute matches, high numbers were found in Spain, Germany, Brazil, and the U.S. For relative matches, the numbers were highest in Greenland, Iceland, and Ireland.

### Surname History

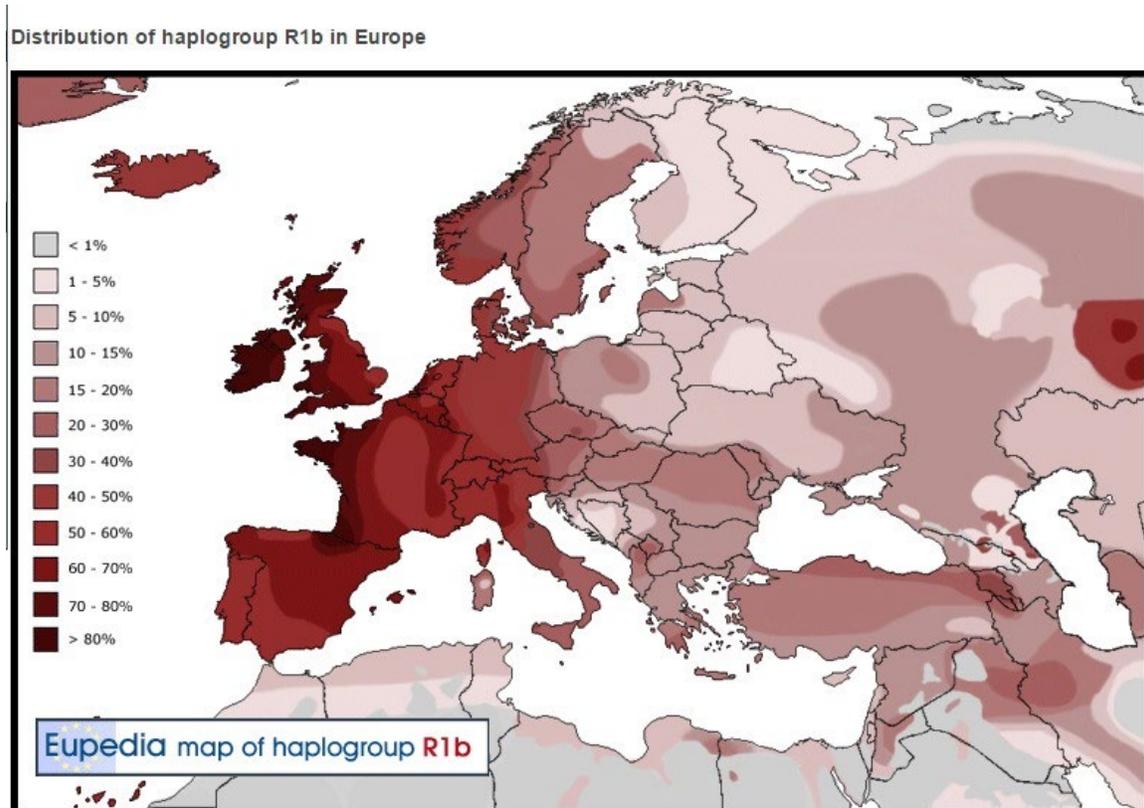
Recorded as Do and Doe, this is an English surname, which is far better known in the United States of America. It originates from the Olde English word 'da' meaning a female deer, and has the associated surnames of Stagg, Roe, and Roebuck.

Read more: <https://www.surnamedb.com/Surname/Doe#ixzz65NC8eXPe>

### Analysis and Conclusion

On his father's side, the subject descends from a male ancestor who belonged to [haplogroup R1b](#), sometimes (although somewhat misleadingly) called the Atlantic Modal Haplotype (AMH, Wilson). Hispanic matches suggest that the progenitor of this mega-lineage might have lived in Spain. The subject's haplotype, R1b1a, probably also came in remote times from Spain.

It reaches its highest frequency on the Atlantic Fringe, in Connacht, Ireland. Bryan Sykes in his book *Blood of the Isles* (in America, *Saxons, Vikings and Celts*) gives the populations associated with R1b the name of Oisín for a clan patriarch, much as he did for mitochondrial haplogroups in his work *The Seven Daughters of Eve*. [Stephen Oppenheimer](#) in his book [The Origins of the British](#) calls this type Ruiz and maintains Ruiz was the first and most numerous male type to populate the British Isles following the last Ice Age (pp. 188f.). He theorized that the vast majority of British ancestry originated in a paleolithic Iberian people, traced to modern-day [Basque](#) populations, represented by the predominance of [Haplogroup R1b](#) in the [United Kingdom](#) today.

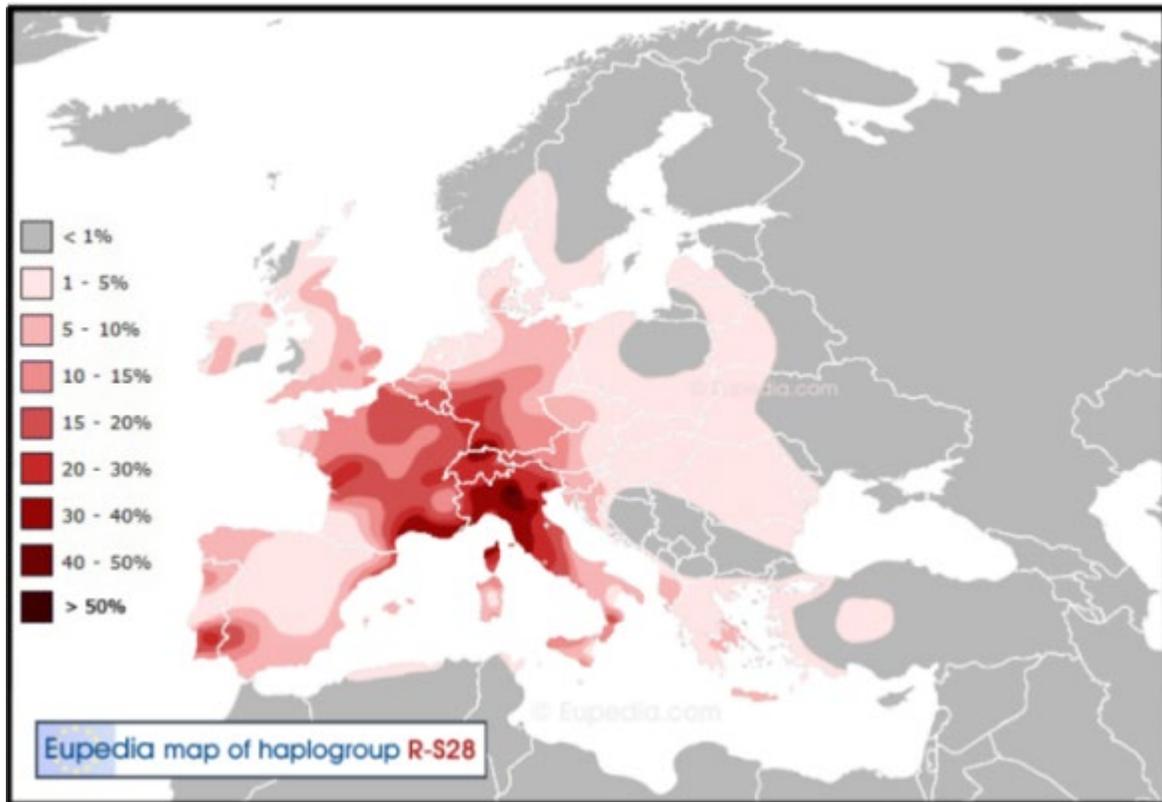


Haplogroup R1b is the most common male type in modern-day Europe, found in approximately 40% of all males. The mutations characterizing it are M173 and M343 (Y Chromosome Consortium; Karafet et al.). The subject's particular male lineage probably originated in the British Isles (to judge from the surname history).

R1b was formerly viewed as the lineage of the Niall of the Nine Hostages. More recent studies of its high concentrations in Belfast (44%) and County Mayo (43%), however, suggest that the pattern more generally "hints at La Tène movements into Ireland" (Manco, pp. 189-90).

The oldest forms of R1b (M343, P25, L389) are found dispersed at very low frequencies from Western Europe to India, a vast region where could have roamed the nomadic R1b hunter-gatherers during the Ice Age. The three main branches of R1b1 (R1b1a, R1b1b, R1b1c) all seem to have stemmed from the Middle East. The southern branch, R1b1c (V88), is found mostly in the Levant and Africa. The northern branch, R1b1a (P297), seems to have originated around the Caucasus, eastern Anatolia or northern Mesopotamia, then to have crossed over the Caucasus, from where they would have invaded Europe and Central Asia.

U152 and P312 were found in approximately the same percentage in the subject's results. Further clarification would require more extensive lab analysis. The designations such as U152/S28 refer to the same findings by two different research groups and are interchangeable.



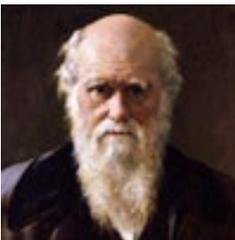
According to [Eupedia](http://Eupedia), the following men are famous examples of R1b:



According to the Grant DNA Project, Ulysses S. Grant (1822-1885), the 18th President of the United States and the military commander of the American Civil War, belonged to the FGC8590 subclade of R1b-U106, downstream of L47 and Z159 (descendant of Matthew Graunt).



Rogaev et al. (2009) tested the DNA of the presumed grave of **Tsar Nicholas II of Russia** and all his five children, and compared them against archival blood specimens from Nicholas II as well as against samples from descendants of both paternal and maternal lineages. The results unequivocally confirmed that the grave was the one of the last Russian Royal family. Nicholas II belonged to Y-haplogroup R1b and mt-haplogroup T2. Consequently, all Russian emperors of the Romanov dynasty since Peter III (1728-1762) also belonged to haplogroup R1b. This paternal lineage ultimately descends from the House of Oldenburg, which includes all the Kings of Denmark since Christian I (reigned from 1448) as well as several Kings of Norway, Sweden and Greece, and the current heirs to the British throne (Prince Charles and his son Prince William).



The great English naturalist **Charles Darwin** (1809-1882), who proposed the scientific theory of evolution and the process of natural selection, was a member of haplogroup R1b according to the test results from his great-great-grandson.

Quite a few U.S. Presidents had their haplogroups deduced from descendant testing. Among those whose R1b subclade remains to be determined, we find **Zachary Taylor** (12th), **Franklin Pierce**(14th), **William McKinley** (25th), and **Woodrow Wilson** (28th)

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#### **Disclaimers**

This DNA Ancestry Test is a probabilistic prediction of ancestry for personal knowledge only. It is a nonchain of custody form of testing and is not intended for legal or official purposes. Its results may or may not confirm expected ethnic composition, family history or genealogical determinations. Alone, it may not be used to prove identity, biological relationships, nationality, citizenship, immigration or tribal enrollment.

#### **References and Suggestions for Further Reading**

1. Capelli, C. et al. (2003). "A Y Chromosome Census of the British Isles." *Current Biology* 13:979–984.
2. Jobling, M. A. & Tyler-Smith, C. (2003). "The Human Y Chromosome: An Evolutionary Marker Comes of Age." *Nature Rev. Genet.* 4:598-612.
3. Karafet T. M. et al. (2008). "New Binary Polymorphisms Reshape and Increase Resolution of the Human Y Chromosomal Haplogroup Tree." *Gen. Res.* 18:830-8.
4. Semino, O. et al. (2000). "The Genetic Legacy of Paleolithic Homo sapiens sapiens in Extant Europeans: A Y Chromosome Perspective". *Science* 290 (5494): 1155–9.
5. Sykes, Bryan (2013). (2013). *DNA USA: A Genetic Portrait of America*. New York: Liveright. ----- (2001). *Saxons, Vikings and Celts*. New York: Norton. ----- (2001). *The Seven Daughters of Eve. The Science that Reveals Our Genetic Ancestry*. New York, Norton. Names the founders of Europe's major female haplogroups Helena, Jasmine, Katrine, Tara, Velda, Xenia, and Ursula.
6. Wells, Spencer (2006). *Deep Ancestry: Inside the Genographic Project*. Washington: National Geographic.
7. Willuweit S. and L. Roewer on behalf of the International Forensic Y Chromosome User Group, Y chromosome haplotype reference database (YHRD): "Update." *Forensic Science International: Genetics* (2007) 2. Abstract. YHRD 3.0 Release 50 with 154,329 haplotypes within 991 populations in 129 countries. About 90% have been analyzed for the loci DYS438 and DYS439. Available online at <http://www.yhrd.org>.
8. Y Chromosome Consortium (February 2002). "A Nomenclature System for the Tree of Human Y-chromosomal Binary Haplogroups." *Genome Res.* 12 (2): 339–48.

## Understanding Your Male Lineage

Your **haplogroup** (R1b, R1a, I, G etc.) represents the broad family of male lineages to which you belong. These genetic super-tribes have been traced back about 10,000 years to different areas of origin such as Western Europe, Northern Europe, the Middle East, Africa or the Americas. Geneticists believe all people on earth are descended directly or indirectly from a man who lived in Africa 200,000 to 300,000 years ago (**Y-chromosomal Adam**).

Your **haplotype**, as defined in your **Y chromosome** lab report, is a specific lineage within that haplogroup. It reflects your direct line of father-to-son descent from a common **founder** who lived perhaps 500-1000 years ago, when surnames first appeared. Your lab report lists the **allele** values or **STR markers** for 26 **loci** or specific regions on your Y chromosome DNA. This is your **genetic profile**.

You received this male signature from your father, your father from *his* father, and so forth, unchanged or only slightly modified from generation to generation. Variations over time are called **mutations**.

Many males exhibit an across-the-board match with another male of the same surname. Both are descended without question from a common male ancestor. They are male-linked cousins bearing the same original family name, and a strict pedigree can be constructed. Others, however, match on most [markers](#) but not all. A great deal of expertise is required to judge whether a close match is due to mutations within the same lineage, or whether it represents a different lineage and surname altogether.

### Evaluating a Possible Non-Paternity Event

A “[non-paternity event](#)” indicates a break in the link between the Y-chromosome and the surname. Such a misalignment may happen in any generation. The chance of a nonpaternity event occurring accumulates as you go back in time through numerous generations. Its incidence is smallest in aristocratic lines and highest in groups of low social status. An unfamiliar surname in your male line might come from a distant adoption, illegitimacy, child known by other surname (mother's maiden name, stepfather's name), the use of an alias or a deliberate change of surname. Moreover, it may point to a time before settled surnames came into use. In the British Isles, the transition to fixed surnames handed down in patrilineal fashion began about 1100 and was not complete until after 1600. <sup>1</sup>

It is perhaps helpful to remember that the value of an STR at any given [locus](#) (DYS 393, DYS 390 etc.) can mutate up or down one unit about every 500 years. Since they can change in either direction, however, the effect tends to cancel out. The phenomenon of [convergence](#) occurs when a configuration of scores randomly mutates to correspond to an unrelated haplotype, but this statistical event appears to be extremely rare and can be ignored.

Your **Surname History** has been researched for you in your report. Variants and translations of a surname can often unlock mysteries. Another feature of Ysearch is the search by surname. This approach is a good means to see how your surname corresponds to your haplotype. Surnames can have several valid haplotypes, and a haplotype can be borne by males of different surnames.

### Some Reading and References

1. Eupedia, “[Distribution of Y Chromosome DNA Haplogroups](#)” (major guide to European types), [Europe Forum](#) (and other free forums).
2. Hirschman, Elizabeth C. and Donald N. Yates (2012). *Jews and Muslims in British Colonial America: A Genealogical History*. Jefferson: McFarland. Exhaustive listings of British Hebrew and Arabic surnames from records. ----- (2004). “[DNA Haplotyping and Diversity: An Anthropogenealogical Method for Researching Lineages and Family Ethnicity](#).” Paper published in the Proceedings of the Fourth

International Conference on Diversity in Organisations, Communities and Nations, Los Angeles, Calif., July 6-9, 2004. *International Journal of the Humanities* 2:2043-55.

3. King, T. E. and M. A. Jobling (2009). "What's in a Name? Y Chromosomes, Surnames and the Genetic Genealogy Revolution." *Traces in Genetics* 25/8:351-60. Authors' revised version. ----- (2009). "Founders, Drift, and Infidelity: the Relationship between Y Chromosome Diversity and Patrilineal Surnames." *Molecular Biology and Evolution* 26/5:1093-1102.
4. Manco, Jean (2014). *Ancestral Journeys. The Peopling of Europe from the First Venturers to the Vikings*. London: Thames & Hudson.
5. Oppenheimer, Stephen (2006). *The Origins of the British. A Genetic Detective Story*. New York: Carroll & Graf.
6. [Surname Studies](#) (bibliography). Comprehensive list, good for rare surnames and foreign languages and cultures.
7. Sykes, Bryan (2013). *DNA USA: A Genetic Portrait of America*. New York: Liveright. --- ----- (2001). *Saxons, Vikings and Celts*. New York: Norton.
8. Sykes, B. & C. Irven (2000). "Surnames and the Y Chromosome." *American Journal of Human Genetics* 66:1417-19. The article that spawned an industry.

For help in evaluating your report, contact us at [dpy@dnaconsultants.com](mailto:dpy@dnaconsultants.com) or call DNA Consultants at 888-806-2588 Monday through Friday 10 a.m. to 6 p.m. Mountain Time. We pride ourselves on customized service and will be glad to walk you through your report and answer all your questions personally.

# World Heat Map for John Doe

