



John Doe

DNA Fingerprint Report

Plus 18 Marker Ethnic Panel

D4416 - DP11-09455

Genetic systems known as **autosomal markers** were analyzed at **Chromosomal Laboratories**. Testing revealed your unique **DNA fingerprint** or **profile**. The table below shows you how your personal DNA Fingerprint looks. The numbers reflect your genetic inheritance from all previous generations and can suggest statistical matches for your overall ancestry or mix of lines.

Your Lab Results

Locus	Alleles		Range
D8S1179	14	13	<9 - >17
D21S11	29	30	<24.2 - >36
D7S820	11	10	6 - >14
CSFIPO	11	12	<6 - 15
D3S1358	15	15	<12 - >19
THO1	6	9.3	<5 - >10
D13S317	11	10	<8 - >15
D16S539	9	10	<8 - 15
D2S1338	18	23	15 - 28
D19S433	14.2	14	9 - 18.2
VWA	16	17	11 - >22
TPOX	8	10	<6 - >13
D18S51	13	20	<11 - >22
D5S818	11	12	<7 - >15
FGA	23	23	<18 - >30

The scores shown in green and yellow above known as **CODIS** markers were compared with profile frequencies for around 380 populations from around the world stored in our computer program atDNA 3.0. The following populations—though not in strict order of importance—proved to be the leading matches for you on the broadest basis:

Rank	World Population Matches
1	Native American - Arizona - Navajo (n = 93)
2	Native American - Saskatchewan (n = 40)
3	Mexican - Nuevo Leon (n =143)
4	Native American - Northern Ontario (n=129)
5	Native American - Alaskan Athabaskan (n = 101)
6	Native American - Salishan (n = 47)
7	Native American - Minnesota (n = 100)
8	Native American - Minnesota (n = 203)
9	Native American - Minnesota (n = 191)
10	Native American - Northern Ontario (n = 63)
11	Hispanic - U.S. (n = 199)
12	Iberian Peninsula - Basque (n = 50)
13	British (n = 2,100)
14	Mexican - Northeastern - Mestizo (n = 143)
15	Peruvian (n = 100)
16	Native American - Choles - Chiapas, Mexico (n = 109)
17	Korean - Western U.S. (n = 63)
18	Native American - Alaskan Yupik (n = 100)
19	Mexican - Chihuahua (North Central) (n = 161)
20	Brazilian - Amazonian (n = 100)
21	Brazilian - Amazon (n = 100)
22	El Salvadorian (n = 228)
23	Guatemalan - Mestizo (n = 200)
24	Japanese (n = 594)
25	Hispanic - Southwestern U.S. (n = 105)
26	Chinese - Beijing-Han (n = 201)
27	Hispanic - Minnesota (n = 191)
28	Mexican - Hidalgo - Metztitlan (n = 180)
29	Hispanic - Minnesota (n = 151)
30	Hispanic - California (n = 105)
31	Argentinian - Neuquen province (n = 111)
32	Hispanic - Minnesota (n = 75)
33	El Salvadoran (n = 296)
34	Bolivian
35	Chinese - Western U.S. (n = 98)
36	Korean (n = 379)
37	Chinese Han - Chengdu (n = 128)
38	Colombian - Northeastern - Santander (n = 99)
39	Native American - Arizona - Apache (n = 99)
40	Native America- Salisha- British Columbia (n = 104)
41	Argentinian - Salta (n = 83)
42	Hispanic - Florida (n = 100)
43	Colombian - Boyaca (n = 120)
44	Argentinian - Patagonian - Chubut (n = 320)
45	Saudi Arabian (n = 73)
46	Argentinian - Misiones (n = 169)
47	Colombian - Andean, Amazonian, & Orinoquian (n = 846)
48	Chinese Han - Northern (n = 2,211)
49	Ecuadorian (n = 150)
50	Chinese Han - Jilin (n = 200)

Your matches are also shown on the attached ancestry map. Green stands for locations of strongest probable genetic origins, red likely absence of ancestry, and brown weak or ambiguous contributions of ancestry. The time frame is historical, not pre-historical.

According to recent research in population genetics, genes mirror the geography of Europe. Modern-day European subpopulations correspond roughly to national and linguistic boundaries (Lao et al. 2008). An additional search was made for high Random Match Probabilities in the [ENFSI](#) database. This specifically covers European populations, mostly countries in the [European Union](#). While again not necessarily in strict order of importance, your leading matches were:

Rank in Europe	Population
I	Croatia
II	Denmark
III	Netherlands
IV	Switzerland
V	Ireland
VI	Spain
VII	Norway
VIII	France/Lille
IX	Portugal
X	Sweden
XI	Estonia
XII	Scotland/Glasgow
XIII	England/Wales
XIV	Austria
XV	Full Database
XVI	France/Toulouse
XVII	Italy
XVIII	Finland
XIX	Poland
XX	Slovenia

Analysis and Conclusion

Our worldwide and European approaches are combined in the following analysis. Profile frequencies suggest your principal ancestral lines—not necessarily in strict order of importance—are:

Croatian, Danish, Dutch, Swiss, Irish, Spanish/Portuguese, Norwegian, northern French and Swedish (I-X, 3, 11, 12, 14, 15, 17-23) with [American Indian](#) (markers, map, 1, 2, 4-10, 13, 16, 18) admixture.

Tribal affiliations cannot always be determined from the Native American matches, as types of Native American DNA are distributed all across the Americas. Hispanic matches

(including Mexican and Brazilian) do not necessarily indicate Latin American ancestry but signal rather your mixture of Iberian or Western European and Native American ancestry. Some of the British, Irish or Scottish matches (or alternatively, some of the Iberian matches) can probably be attributed to deep ancestry, as it is believed that Iberians on the Atlantic Coast such as the Basques and Portuguese were the leading colonizers of the British Isles following the last Ice Age (Oppenheimer).

There appears to be no [Sub-Continental Indian](#) (except as may pertain to Gypsies, who originated in India, see [Iovita](#)), [East Asian](#), [Sub-Saharan African](#) or [Australoid](#), any apparent matches being due to accidental [convergence](#) or deep history.

Remember: results do not equal percentages. They show only that your profile, on the face of it, is most common in present-day Native American, European and certain other populations. These unique genetic [polymorphisms](#) may or may not be reflected in your individual physical appearance. Nonetheless, they can be expected to be associated with certain recognizable family traits.

Donald N. Yates, Ph.D.

Principal Investigator

[DNA Consultants](#)

June 30, 2011

18 Marker Ethnic Panel

These eighteen markers correlate at a rate of 80% with probable ethnic ancestry as indicated. They reflect major human migrations as depicted on the following map. Since you receive one allele (unit of human variation) from one parent and one from the other, you can potentially have two markers, one or none. It is not possible to say which parent you get a marker from in any instance, and the fact that you do not have a marker does *not* mean that you lack that ancestry. Due to the nature of autosomal DNA, one sibling can get a marker and another could miss getting it.

Marker	Parent	Parent
NATIVE AMERICAN I	✓	✓
NATIVE AMERICAN II	✓	
EUROPEAN I	✓	
EUROPEAN II		
EASTERN EUROPEAN I		
EASTERN EUROPEAN II	✓	
JEWISH I		
JEWISH II		
JEWISH III	✓	
JEWISH IV		
ASIAN I	✓	
ASIAN II		
ASIAN III	✓	
ASIAN IV		
SUB-SAHARAN AFRICAN I		
SUB-SAHARAN AFRICAN II		
SUB-SAHARAN AFRICAN III		
SUB-SAHARAN AFRICAN IV		

Full European Database Index: 3.23E+12

This number expresses a **Random Match Probability (RMP)**. It reflects the rarity or commonness of your genetic profile in Europe, that is, your proximity to having 100% European ancestry, as opposed to having some non-European (African, Middle Eastern, Asian, Native American). 1.00E+14 equals a chance of 1 in 100,000,000,000,000 or a likelihood of occurrence of 1 in 100 trillion. The higher the number (greater the exponent) the less European you probably are. The smaller the number (smaller the exponent) the less apt you are to have non-European ancestors. The range is +10 (common) to +20 (rare).

Key to Ethnic Groups

NATIVE AMERICAN I. This marker is inherited by an individual who has some degree of Native American ancestry. Often it comes from only one parent. As with other markers, if you didn't get it, that does not mean you don't have any Native American ancestry. Pairs of markers (**alleles**) are reshuffled from generation to generation, and it could have been lost. You may have it, but a sibling might not. By "Native American" is meant any of the indigenous groups who lived in either North or South America before

Columbus. It is the same designation as [American Indian](#). Native American DNA is so distinctive that this test can detect even small amounts of it because of multigenerational interbreeding and effective conservation of admixture markers. But despite what you may have heard, no DNA test can definitively tell you what percentage of admixture you have. *Studies show about 80% of modern-day North and South American indigenous peoples have at least one of these markers.* NA I is strong throughout the Americas, from Apaches and Algonquian Indians to Mexican and Peruvian Indians.

NATIVE AMERICAN II. Similar to Native American I but found typically in people who are half or less Native American and about half Iberian with sometimes a lesser amount of Sub-Saharan African, i.e., Hispanic or Latino.

EUROPEAN markers are located on two different [chromosomes](#) and relate to prehistoric human migrations in [Eurasia](#). Certain readings on these two sites are nearly specific to European populations, including European emigrants to North and South America. [Europe](#) embraces, north to south, Scandinavia, Spain, Italy and Greece, and west to east, the British Isles, Poland and that part of Russia west of the Ural Mountains. Both [EUROPEAN markers](#) were carried westward by proto-Europeans approximately 40,000 years ago after they split off from an earlier stock from which Asians and Native Americans are also descended.

EUROPEAN I is a [Mediterranean](#) marker. If you have it, your ancestors passed down to you a genetic heritage emphasizing the South of Europe, populated by the oldest Europeans. The frequency of this marker decreases as we go north. Conversely, [EUROPEAN II](#) is more common in the Atlantic-facing countries of the British Isles and Northern Europe, particularly Northwest Europe.

EASTERN EUROPEAN. These are two markers, each diagnostic of Eastern European ancestry in your family tree. They are most common in Swedes, Poles, Lithuanians, Belarusians, Latvians, Ukrainians and Russians. They are found frequently also in [Ashkenazi Jews](#). Except for Sweden, all the matching countries are predominately [Slavic](#) in their demography and culture.

JEWISH. These markers do not *necessarily* point to Jewish ancestry but can also signal ancestry in any of the places where Jews historically lived due to Jews' admixture with local populations, conversion, identity loss and the phenomenon of crypto-Judaism. *Still, statistics show that over 80% of modern-day Jews have one or more markers.* They are sensitive for both major branches of Judaism, [Ashkenazi](#) and [Sephardic](#), or Spanish, Jews. Ashkenazi Jews ("German," in Hebrew) started out in the Rhineland and northern France following the collapse of the Roman Empire. During the Age of Charlemagne around 800 they began to settle eastward as the lands of the Central and Eastern European Slavs were conquered by the Franks and Germans. There they met the Turkic Khazar people moving in from the Caucasus region. They reached a high point in their development in seventeenth-century Poland, Lithuania, Silesia, the Ukraine, Russia and Romania. During Germany's Third Reich, six million or more of them were killed in the Holocaust. In contemporary times, they represent perhaps the best-known face of Judaism, accounting for about 80% of American and Israeli Jews. Because they trace back to a small nucleus (founder effect or bottlenecking) which kept expanding while preserving the same gene pool (genetic drift), Ashkenazi Jews have very recognizable genetic traits. They are subject to a range of hereditary disorders such as Tay-Sachs disease. As in the case of other markers, Jewish I, II and III are not completely conclusive in showing ancestry, nor do they tell you how much you may have or where in your genealogies it may stem from.

JEWISH I. This is the most common of the three markers. It can occur without known Jewish ancestry for a variety of reasons including an ancestor's conversion to Christianity during the centuries of persecutions against Jews in Europe. Its frequency is highest in Poles, Russians, Germans, Hungarians, Romanians and Slavic peoples who intermarried with Ashkenazi Jews. It also appears in Spanish, Portuguese and Moroccan Jews ([Sephardim](#)).

JEWISH II. This marker is the strongest. It is found in Jewish families who have intermarried with other Jews down through the centuries. It is characteristic of Ashkenazi Jews.

JEWISH III. This marker is an indication of Middle Eastern roots. Preserved by Jews, it is also borne by Kurds, Syrians, Arabs, Berbers, Basques, Turks, Greeks, Italians and other populations from the ancient world.

JEWISH IV. A marker indicative of Tatar or Khazar heritage. Khazars were a Central Asian people of Turkic, Hunnish and Iranian elements that arose in the Caucasus region. After converting to Judaism in the early Middle Ages, they moved westward into Russia and the Ukraine under pressure from Islam, eventually becoming a large component of Eastern and Central European Jewry. Many Ashkenazi Jews now find they have some Khazar (or intermingled Tatar) ancestry.

ASIAN I, II, III, IV. In the context of DNA Fingerprint Plus, Asia consists of China, Siberia, Mongolia, Korea, Japan and other islands around the China Sea, as well as **India**, Southeast Asia and Australia. Asian I is centered in North China, Asian II in India and Asian III and IV in Southeast Asia.

SUB-SAHARAN AFRICAN (Black). Humans are believed to have lived originally in Africa. All non-African peoples are thought to have left that continent in a single small group about 80,000 years ago, developing into the proto-Arab, Indian, **Southeast Asian**, Australoid, East Asian, European and Native American ethnic groups. **Sub-Saharan Africa** (below the Sahara Desert) excludes North Africa, which is considered Caucasian (White) and customarily grouped with the **Middle East**. Between the sixteenth and nineteenth centuries, about 15 million Africans were transported to the New World as slaves, primarily from West Africa, Angola and Mozambique. Their descendants are the African Americans, among others. African ancestry is not uncommon in Portuguese, Sicilian and Middle Eastern people. SSA I follows the out-of-Africa trail of early Eurasians through Arabia and South India and occurs at its highest frequency in the Horn of Africa. SSA II originates apparently in Southwest Africa, is deep seated and includes West Africans, Romani, Melungeons, Basques and Levantine peoples. SSA III is another deep seated marker from the interior of the African continent. It is very rarely found in Asian peoples. SSA IV includes Berbers and African Americans and is also found in Greeks, Egyptians, Italians and other Mediterranean peoples.

References and Suggestions for Further Reading

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which now anomalous lineages H, I, J, T, K, N, U and others previously restricted to European origin must be added.

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Glossary of Terms Used in This Report: <http://dnaconsultants.com/glossary>.

Understanding Your Results (FAQs): <http://dnaconsultants.com/DNAScience#testfaq>.

Statement on Ethnicity. Allelic population analysis is a science still in the early stages of development. As our understanding of human history and prehistory improves and more specific markers are discovered for distinct populations we can expect the accuracy of prediction of the ethnic constituents in our ancestry to increase. Here are some links to common ancestries mentioned in this report.

[Albanian](#) [Arab](#) [Ashkenazi](#) [Austrian](#) [Belgian](#) [British](#) [Croatian](#) [Czech](#) [Danish](#) [Dutch](#) [English](#) [Europeans](#)
[French](#) [German](#) [Greek](#) [Hungarian](#) [Irish](#) [Italian](#) [Jews](#) [Middle Eastern](#) [Moroccan](#) [Norwegian](#) [Polish](#)
[Romani/Gypsy](#) [Russian](#) [Scottish](#) [Sephardic](#) [Slovenian](#) [South Slavic](#) [Spanish/Portuguese](#) [Swedish](#)
[Swiss](#) [Tunisian](#) [Turkish](#) [Welsh](#)

Reliability. While the laboratory methods used to determine your DNA markers are completely accurate and their statistical analysis is reliable, interpretation of the numerical results is subjective. Conclusions will vary. To form more confident opinions, we suggest that you combine the findings in this report with other testimony, such as that of DNA haplotypes, genealogical records and family history.

Confidentiality. Your testing, results and this report are 100% confidential.

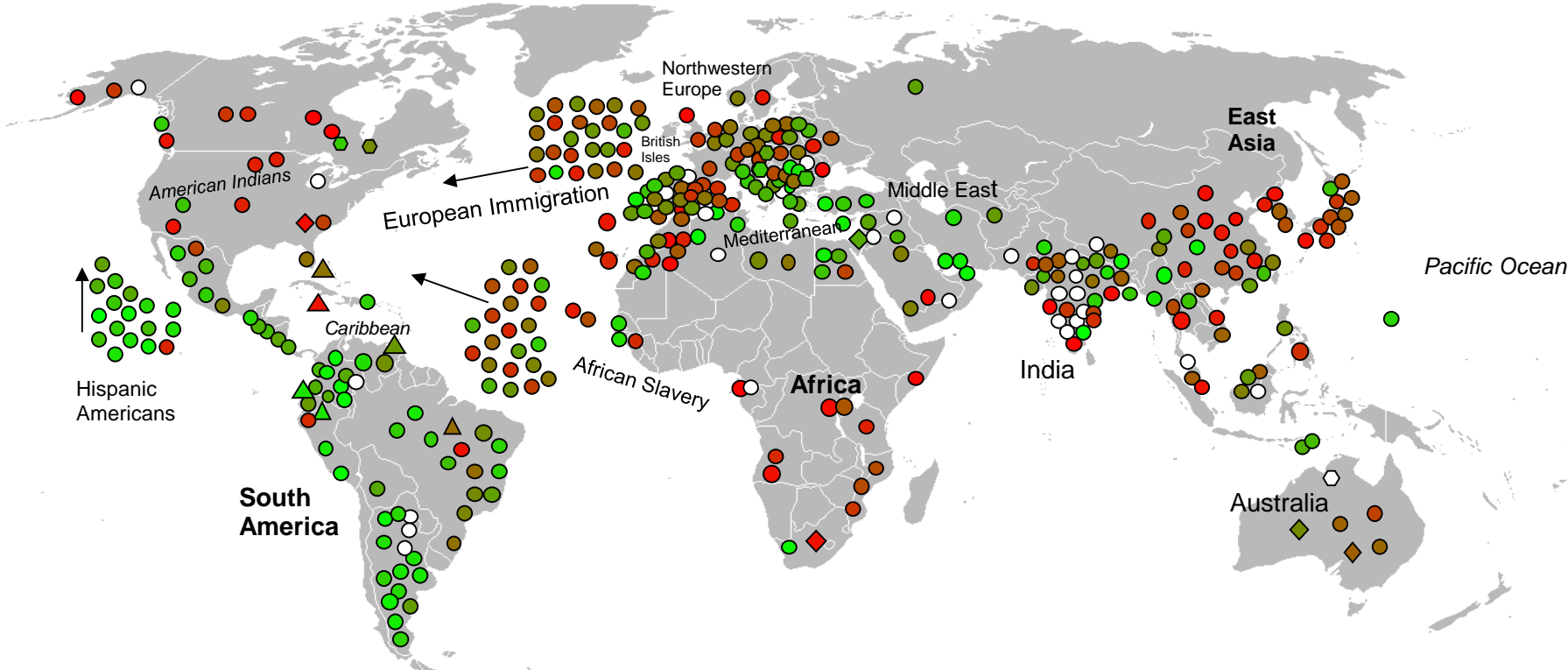
Preservation. Have you preserved your DNA? Purchase our economical [DNA Archiving Pack](#) and enjoy a new sense of security. It's easy to do and you can store your DNA in a safe place at home.

Following Up. Join a Forum at [DNA Communities](#) for free. Just follow the prompts to register and set your preferences. Begin exploring your results and sharing your genealogy with others. Choose from European, World, Native American, Melungeon, African, Jewish and Gypsy/Roma discussions. Visit our [blog](#) for interesting reviews of news and research about genetics and ancestry tracing.

PREHISTORIC MOVEMENTS OF ETHNIC GROUPS



World Ancestry of John Doe



- - Asian Origin
- △ - African Origin
- ◇ - European Origin

- Legend**
- Green strong match
 - Brown weak match
 - Red no match
 - No measure possible



THIS DOCUMENT CERTIFIES THAT

John Doe

Ordered a DNA Fingerprint Ancestry Test from Our Laboratories
Yielding the Following Matches

Rank in Europe	Population
I	Croatia
II	Denmark
III	Netherlands
IV	Switzerland
V	Ireland
VI	Spain
VII	Norway
VIII	France/Lille
IX	Portugal
X	Sweden

Rank	World Population Matches
1	British (n = 1, 112)
2	Native American - Saskatchewan (n = 40)
3	Mexican - Nuevo Leon (n =143)
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A handwritten signature in blue ink that reads "Donald N. Yates".

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June 30, 2011