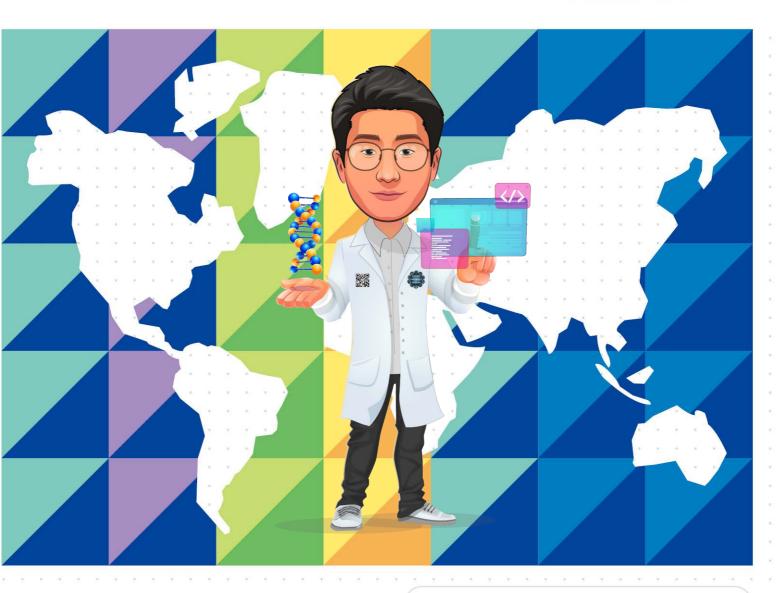


## Geni Code





Name Analysis Date Report Date Issac Lee 06-Feb-2022 06-Feb-2022



# The more you know about DNA, The better you know yourself.



## Table of

## **CONTENTS**

Ancestry Report	1
Understanding the Ancestry Report	2
Understanding Your Results	4
Detailed Results	5
Frequently Asked Questions	6
Our Reference Datasets	8

### **Ancestry Report**

The ancestry report provides insights into your ethnicity and where your ancestors lived. Take time to track your roots and see who your ancestors are.



#### Issac Lee is 100.0% East Asian.

East Asia	100.0%
Korean & Japanese	73.85%
Chinese	24.02%
Mongolian	2.11%
Siberian	0.02%

## **Your Detailed Ancestral Geography**

#### **East Asia**



<sup>\*</sup> For more detailed results including ETC, please see "Detailed results" at the page below.

## **Understanding the Ancestry Report**

Detailed local information to help interpret your ethnic distribution results.



#### Africa

Africa is the second largest and most populous continent after Asia. Africa, especially East Africa, is considered the birthplace of modern humans and is believed to be the first land inhabited by by humans on Earth. In addition to the early Homo Sapiens found in Ethiopia, many apes have also been found which are genetically very similar to humans. A large number of Indian and Arab people have also settled in Africa as a result of commercial exchanges, conquests of northern Sahara by Islamic emperors, etc. In this way, African people coexist with many other cultures. There is a clear distinction between North Africa and Sub-Saharan Africa; North Africa is more closely linked to the Arab world.

#### America

The American region includes both North and South America. America was inhabited by Native Americans for a long time before colonization began by the Europeans. Native Americans are said to have migrated to the American continent through Siberia and the Bering Strait. Native Americans are classified into several sub-ethnicities. Determination of ethnicity has become increasingly complex after the discovery of America by Columbus in 1492, as various foreign populations relocated and merged with local ethnic communities. Over the next several centuries, these ethnicities continued to mix and create the great American diversity found today. These include the Mestizo, Indian, African-American, Mulatto, Zambo, European white pigmented and Asian yellow-pigmented races.

#### Central South Asia

Central South Asia stretches from the Caspian Sea in the west to China in the east and from India in the south to Russia in the north. Since prehistoric times, Central Asia has been a crossroad of civilization. Ever since the Silk Road was founded, European and Middle Eastern regions have been linked to India and China. The Indo-Aryan people were separated from Iranians between 1800 and 1600 B.C. and migrated to Levant and Northwest India. The Turkic people, oppressed by the Mongols, later moved to the western and northern parts of Central Asia. The indigenous people of India were the Dravidian people of black descent, who became a minority as the Aryans of the Caucasus race expanded. Turkmen and Uzbek are a mixture of yellow and white skinned races belonging to the Turanid group. Kyrgyz and Kazakh share traits of the northern tribe of yellow descent close to the Eastern Turk.

#### East Asia

East Asia includes China, Japan, South Korea, and Southeast Asia. Population of Southeast Asia spread to East Asia, and Southeast Asian and East Asian populations have moved to the Asian continent through a single route. The people of South Korea, China, and Japan share genetic similarities. China is made up of 55 different ethnic groups; the Han is the ethnic majority. The biggest influence on East and Southeast Asian civilization is China, except for Vietnam, which appears to be more affected by Indian civilization.

#### Europe

Europe accounts for one-fifth of the western part of Eurasia and has a higher proportion of the coast that borders the continent than other continents. Europe is the origin of Western culture which came from ancient Greece and ancient Rome. The first humans to live in Europe were Homo Erectus, who lived in Georgia about 1.8 million year B.C. The Neanderthals, who appeared in 150,000 B.C. and were extinct by about 28,000 B.C., are also considered among the first people to live in Europe. In the Middle Ages, the great migration of the Germanic tribes led to wars and migrations of numerous ethnic groups, such as the Gottes, the Vandals, the Huns, the Franks, the Angles, the Slavs, the Arabs, the Bulgarians, the Vikings, the Pechenergs, the Kumanians and the Hungarians. There are 87 ethnic groups in Europe, 33 which form a majority in at least one sovereign country and the remaining 54 groups as minority. European culture is thought to be among the most influential cultures in music, art, architecture, literature and science.

#### Middle East

The Middle East is a region of Central and Western Asia that covers the areas from the East Central Sea to the Persian Gulf, including countries in western Asia and north Africa. This region has historically been a crossroad of diverse cultures. The Arabs were Semitic people who settled in the Arabian Peninsula and lived nomadic lives. They currently live in Saudi Arabia, Iran, Iraq, Syria, and North Africa. The Persians are referred to as the Iranian people of the Aryans who live in Iran. The Turkish belong to the ethnic Turks, who are widely distributed throughout the Asian continent. Therefore, even if a person is a Turk, their ancestry differs greatly depending on the region and the sub-ethnic groups therein. The Middle East is also the historic birthplace of major religions of the world, including Judaism, Christianity, and Islam.

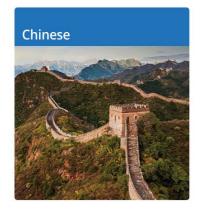
## **Understanding Your Ancestry Report**

Detailed local information to help interpret your ethnic distribution results.



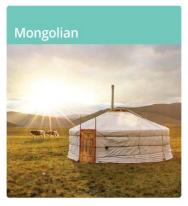
#### Countries Korea, Japan

Koreans and Japanese are geographically close and share a lot of genetic resources. Koreans largely have mixed ethnic groups consisting of two genotype sub-groups; one from northern Asia including Mongolia and Southeast Siberia, and another from southern Asia including Southeast Asia and China. It seems that over 4,000 to 5,000 years ago, the Korean Peninsula and Manchuria developed the same language and culture and shared its historical experiences, thus leading to the rise of the genetically homogeneous Korean people. Koreans are most genetically similar to the Manchurians of northeast China, and then, the Japanese come as second. Since 1948, Korea has been divided into two countries, South Korea and the North Korea, but they are genetically in the same ethnic group. The Jomon, an indigenous people of the Japanese archipelago, and Yayoi, who came from the Korean Peninsula, repeatedly mixed together to become the native Japanese of the present. It turns out that the native Japanese are genetically closer to Koreans than the Ainu or the Okinawa people. There is a continuous mixture of genes between the people of Yayoi and Jomon, the riparian spread of the Hokkaido and Okinawa people are to the north and south, and there are relatively many different genetic characteristics of the indigenous people in the regions of Hokkaido and Okinawa.



#### Countries China, Taiwan

Chinese is a collective term for Chinese people, or the people of China. Today, Chinese people are composed of the main ethnic Han Chinese and 55 ethnic minorities. Generally, the Han is known as the largest single ethnic group in the world, but the group has been around for a long time by absorbing many ethnic groups in the historical community of China. There is a genetic structural difference between the southern and northern Chinese. In the past, the Han has long been ruled by the ruling class of Xianbei who were prevalent in the north while the Han's territory was in the south. Therefore, the Chinese people living in the north usually have the genes of Xianbei, while in the south, the gene of Han Chinese are more common to be found.



#### Countries Kazakhstan, Kyrgyzstan, Mongolia

Mongolia is an inland country located in East Asia. Nomadic people living in Manchuria and northern China are called Mongolians. Since ancient times, many powerful nomadic peoples such as Xiongnu and Göktürks have appeared and disappeared in the Mongolian grasslands. In 1206, Genghis Khan built the Mongol Empire, and when the Mongol Empire collapsed at the end of the 14th century, the Mongol grasslands again emerged with many tribes. The present Mongolians are a mixed race of Xirong, Xiongnu, and Göktürks, who used to exist in the North based in Donghu. In Mongolia, there are not only the Mongols but also several tribes including the Kazak and the Kyrgyz, who belong to the Turkic people. There are about 10 million Mongolian people in the world and they are all typical Mongoloids. Mongolians are relatively small in height and have a wide facial structure. The Kazakhs are characterized by a mixture of Turkish and Mongolian constitutions, and the Kyrgyz people are often confused with the Kazakh people when in fact they are completely different.



#### Countries Russia (Siberia)

Siberians are the people who live in Siberia, located in North Asia. Siberia has long been the land of nomads like the Nets and Huns. In recent centuries, many people migrated from Siberia to other countries due to the harsh weather. Siberia had many ethnic groups, including Tatar, Khanty, Evenk, Buryats, and Chukchis before the invasion of the Russians in the late 16th century. At the far east of Siberia, some Eskimos live near the Bering Strait.



## **Detailed Results**

Region	Subregion	Countries	
East Asia:100.0%	Koreane & Japanes:73.85%	Korea:48.79%, Japan:25.06%	
	Chinese:24.02%	China:24.02%	
	Mongolian:2.11%	Mongolia:1.49%, Kyrgyzstan:0.41%, Kazakhstan:0.21%	
	Siberian:0.02%	Russia(Siberia):0.02%	

## Frequently Asked Questions - Understanding My Results

Your Ancestry Results contain a variety of information.

Here are answers to our frequently asked questions when interpreting the Ancestry Results.



## 1. Why don't my Ancestry results match what I expected or have known about myself until now?

Issac Lee

Our test is very precise. However, there are several unexpected factors which also may affect the ancestral ethnicity. One typical factor would be due to a common history. Some groups that have shared a common history may have close ethnic backgrounds as they may have been classified by political boundaries. We can derive that the constituting population of the ancestors is defined not by countries but by genetically similar groups, typically those who are close by regions. Second factor is that your ancestry may be composed of a minority group that our database does not have in order to provide you the information of the specific minority group.



#### 2. How do I read my ethnic results on the ethnicity map?

Ancestry Admixture Results can be interpreted by referring to the color key on the map and matching the colors to your result pie chart. The pie chart is to provide you a better visualization of your results.



#### 3. Can I trust the results of the test?

We strive to provide our customers the most accurate results through our test. EDGC uses advanced technology based on high scientific knowledge and data to achieve the results we provide. For higher accuracy, we have tested more than 600,000 genomic position by measuring and analyzing whole human genomes. We keep the quality condition of your DNA sample safe during the whole testing process. We are able to provide you the results of your closest ancestral ethnic group by comparing your DNA with our reference dataset.



#### 4. Is it possible to get different results depending on companies?

Each company uses different sets of reference data. If EDGC's results are different from the results you received from other tests, they may reflect differences in the way the genetic system is calculated by each company. The EDGC's reference dataset consists of over 7,000 people with known ancestry and it is based on this dataset that we define specific ancestor ethnic groups.



#### 5. What does 0.1% mean in the results?

If you have 0.1% of your ancestors in the results, it means that you may have had ancestors from the specific population at least seven generations ago. Even small proportions of ancestry can effect and mean different things to different people. It is unclear how much DNA you obtained exactly from your ancestors due to the randomness of gene inheritance. It is not possible to track down precisely 0.1% of ancestry.



#### 6. Why is Russia classified as East Asia or Europe?

Russia can be categorized as East Asia or Europe depending on the region and/or ethnicity. Groups who live close to Europe are classified as Europe. On the other hand, Siberians, the group residing in the middle or east of Russia, are distinguished as East Asians



#### 7. Can I receive information about my Y-DNA or mitochondrial DNA?

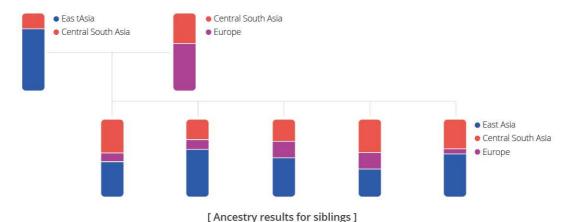
The current version does not provide Y-DNA and mitochondrial DNA results.





#### 8. My Ancestry composition is different from my sibling's. Why?

Parents and their children share only about half of the DNA. The randomness of gene inheritance is one possible reason. Please refer to the picture below.





#### 9. What does ETC mean?

ETC represents the sum of your comparatively minor ethnicities except for your top 3 results. Due to space related reasons, only a maximum of three results appear in our overview report. For more specific information, please proceed to read "Detailed results" on the page below, to check your whole-sub regions and countries.

#### **Disclaimers**

Another fact you should keep in mind when looking at the report is that ethnic estimates are still a topic that is actively being researched. We have a very high level of accuracy in ancestral ethnicity results and we do our best to provide our consumers the best estimates. However, finding the perfect ethnicity estimation is difficult. If a population is always kept isolated and free from any kind of mixture with other populations, it is very easy to discover the ethnicity of each person. But for centuries, immigration, military aggression, inbreeding marriages, and other events alike have ensued enabling most people today to be mixed with different ethnic groups.

As of the present, the EDGC is confident that we will provide you the most accurate estimations, taking into account individual reference datasets of over 7,000 individuals. You can be assured that we are working to continually improve the accuracy of your ethnicity estimations. The reports we provide are created based on standard analysis from genotyping analysis and are not intended to be used as medical advice, for diagnosis, or for treatment. Analysis or reports are for informational purposes only. Any gene or mutant marker used in the analysis is subject to change, and, accordingly, that change may alter the analysis and reports thus providing an entirely different result. The risk pertaining to various conditions provided by the report is a relative level of risk, and depending on the race and/or country, different results may be given. If there are any questions regarding a medical condition, you should consult with a doctor.

### **Our Reference Datasets**

This tells you how many reference objects are used in the analysis to define the race of each ancestor. The reference dataset consists of approximately 9,000 people including the Human Genome Diversity Project, public data from the HapMap and 1000 Genomes projects, and many of our customers who have agreed to participate in the study.

Continent	Ethnicity	Country	Sample Size
		Ethiopia	19
		Kenya	111
		Sudan	17
		Central African Republic	36
		Democratic Republic of Congo	15
Africa	Sub-saharan African	Gambia	113
		Nigeria	207
		Senegal	24
		Sierra Leone	85
		Namibia	7
		Angola	8
		Haiti	96
		Puerto Rico	104
		Mexico	114
		Bolivia	23
	A1 A	Brazil	45
America	Native American	Argentina	13
		Colombia	94
		Peru	85
		Dominica Republic	26
		Ecuador	20
	Siberian	Russia(Siberia)	107
	Japanese & Korean	Japan and Korea	1826
		China	414
	Chinese	Taiwan	15
		Kazakhstan	28
	Mongolian	Kyrgyzstan	53
		Mongolia	40
East Asia		Brunei	39
		Philippines	37
		Myanmar	20
	Caratha a ataus Asias	Indonesia	429
	Southeastern Asian	Singapore	25
		Malaysia	8
		Cambodia	11
		Vietnam	99
		Turkmenistan	23
	Central Asian	Uzbekistan	15
		Tajikistan	54
Central South Asia	Southern Asian	India	390
		Pakistan	246
		Bangladesh	86
		SriLanka	102
		Afghanistan	55
		Nepal	25



Continent	Ethnicity	Country	Sample Size
	Ashkenazi Jewish	Countries in Europe	21
	Sardinian	Italy	28
	Italian	Italy	145
	Iberian	Spain	107
		Bosnia-Herzegovina	15
		Croatia	20
		Greece	53
		Macedonia	14
		Moldova	19
	Balkan	Montenegro	14
		Romania	16
		Serbia	18
		Kosovo	9
		Bulgaria	31
	British & Irish	United Kindom	107
	British a man	Denmark	150
		Norway	26
Europe	Scandinavian	Sweden	1000
		Iceland	12
	Finnish	Finland	99
	1 11 11 11311	France	29
	Western European	Germany	17
	Westerri Edropeari	Netherlands	250
		Belarus	18
		Czech	10
		Estonia	19
		Hungary	40
		Latvia	6
	Eastern European	Lithuania	10
	Lastern European	Poland	18
		Russia(Europe)	57
		Slovenia	41
		Slovakia	15
		Ukraine	20
		Armenia	58
		Azerbaijan	16
		Cyprus	12
		Georgia	40
	Western Asian	Iran	1047
		Lebanon	75
		Syria	64
		Turkey	19
Middle East		Saudi Arabia	69
		Yemen	10
		United Arab Emirates	14
		Jordan	71
	Northern African & Arabian		30
		Algeria	
		Egypt	12
		Morocco	25
		Tunisia	12

#### **Notes**




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