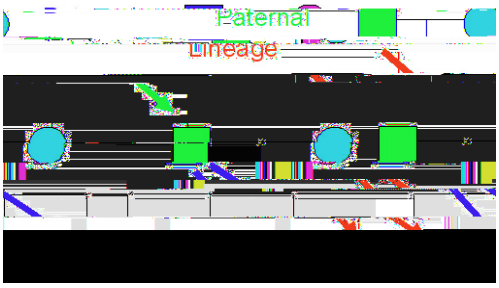
Genelex Laboratory #:2000-12

Participant: John Doe

Purpose of Y-chromosome Analysis:



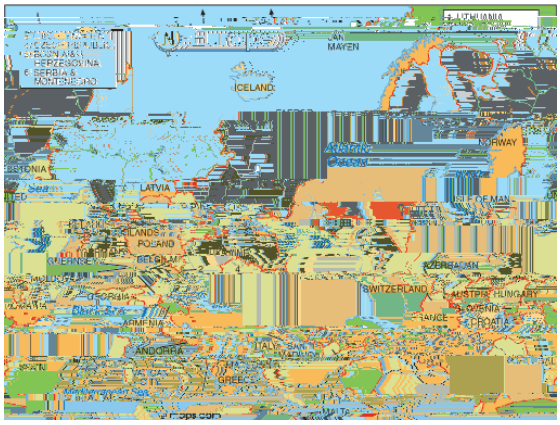
A Y-chromosome DNA profile can provide unique information about the paternal lineage of a particular individual. This profile is generated when specific, individually variable regions of Y-chromosome DNA are tested using established methods. If no genetic changes (mutations) have occurred between generations, then all male descendants of a common paternal ancestor will share the same profile. When differences between individuals are identified, the likelihood of relatedness can be calculating by comparing their DNA profiles, a process commonly referred to as a Most Recent Common Ancestor Calculation (MRCA).

DNA Analysis was performed for the purpose of establishing a Y-chromosome genetic profile. Through standardized, quality techniques and analysis, 24 specific genetic markers (loci) of the Y-chromosome have been analyzed, and confirmed allele values for each are presented in your certificate. A genetic profile is established by assigning the correct allele value to each of the 24 genetic locations and combining them as a unique set. This information was then referenced with current Y-chromosome haplogroup data sets and archaeological information sources to provide a description of the origins of your paternal line.

Haplogroup Assignment:

Based on close genetic matches found in a worldwide Y chromosome database, it appears that you belong to Haplogroup R1b.

Haplogroup Description:



According to genetic theory, all humans descend from a man nicknamed "African Adam." This unknown man lived in Africa approximately 59,000 years ago, about 85,000 years after our common female ancestor, "African Eve." Other men of his time certainly left sons and grandsons, but African Adam was the only man in his generation whose descendants in the male line are still living today. Descendants of African Adam and African Eve left eastern Africa about 50,000 years ago. One group left Africa and spread via a coastal route to India, Siberia and eventually arriving in America. The other group moved into Asia Minor about 45,000 years ago. Your ancestral group belongs to an ancient Eurasian “clan” who entered Europe about 35,000 years ago.

Paleolithic Era in Europe:

Prehistorical times are studied in three separate periods. Since the emergence of humans until 12000 B.C., this first period is called the

places for your ancestors. Some of the most famous Paleolithic cave art locations are Lascaux, Altamira, and Chauvet.

Aurignacian tools included scrapers, burins (which made the engraving possible), and blades. Points and awls were fashioned from bones and antlers. Aurignacian art represents the first complete artistic tradition, moving from

The Middle Magdalenian era (from 14,500 to 13,000) sees the development of the conquest and mastery of the territory. Tools also become more advanced during the Upper Paleolithic with a shown dependence on compound tools (tools which can be repaired as opposed to replacing the whole tool) such as detachable spear points. Spear shafts were carved. Ample evidence was also available for the first time of tools for making tools, such as burins which were used to produce tools out of materials such as antler and bone. This led to tools which could be more easily sharpened, were more durable, and were capable of producing clothing along with tents with greater ease. A large amount of the implements originated from two great regional base camps: Isturitz (Pyrénées-Alantiques) and Mas-d'Azil (Ariège). The Magdalenian culture's end corresponded roughly with the end of the Ice Age and the loss of large game, all of which occurred around approximately 10,000 BC.

Neolithic Era in Europe:

Beginning around 8,000 BC, many human cultures became increasingly dependent on cultivated crops and domesticated animals to secure their supply of food. Some hunting-gathering groups developed more intensive techniques that permitted them to establish village-farming settlements. A sedentary life may have been made possible by abundant resources due to improved post-glacial climatic conditions, with a culture living from hunting, fishing and gathering, including the use of wild cereals. Tools were available for making use of cereals: flint-bladed sickles for harvesting, and mortars, grinding stones, and storage pits. The Mediterranean zone became the centre of the first cultural modifications leading from the last hunters and food gatherers to the earliest farmers.

The earliest houses of central Europe were very large, up to 135 feet in length and large enough to accommodate a whole lineage or small clan together with stalled cattle and grain stores. These communal houses gave place to smaller two-roomed dwellings, 25 to 33 feet long, but still entered through one end. Finally in late Neolithic times clusters of one-roomed huts became the most widespread fashion. Around the Alps such two-roomed houses and, less often, one-roomed huts were raised on piles above the shores of lakes or on platforms laid on peat mosses. Neolithic art, except among the hunter-fishers of the taiga, was geometric and not representational. It is best illustrated by the decoration of pottery. Pots, which were always handmade, were painted in southeastern Europe.

During the period of the Neolithic revolution (8,000-5,000 BC), agricultural techniques of production expanded from the Middle East to other areas of the globe where the climate permitted. The basis of life

or campsite. Genelex hopes that this information has been exciting and informative to you. We are honored to have played a role in your search for your genetic ancestry.

Percentage of Population that are Haplogroup R1b:

Andalausian -65.5%
British – 72%