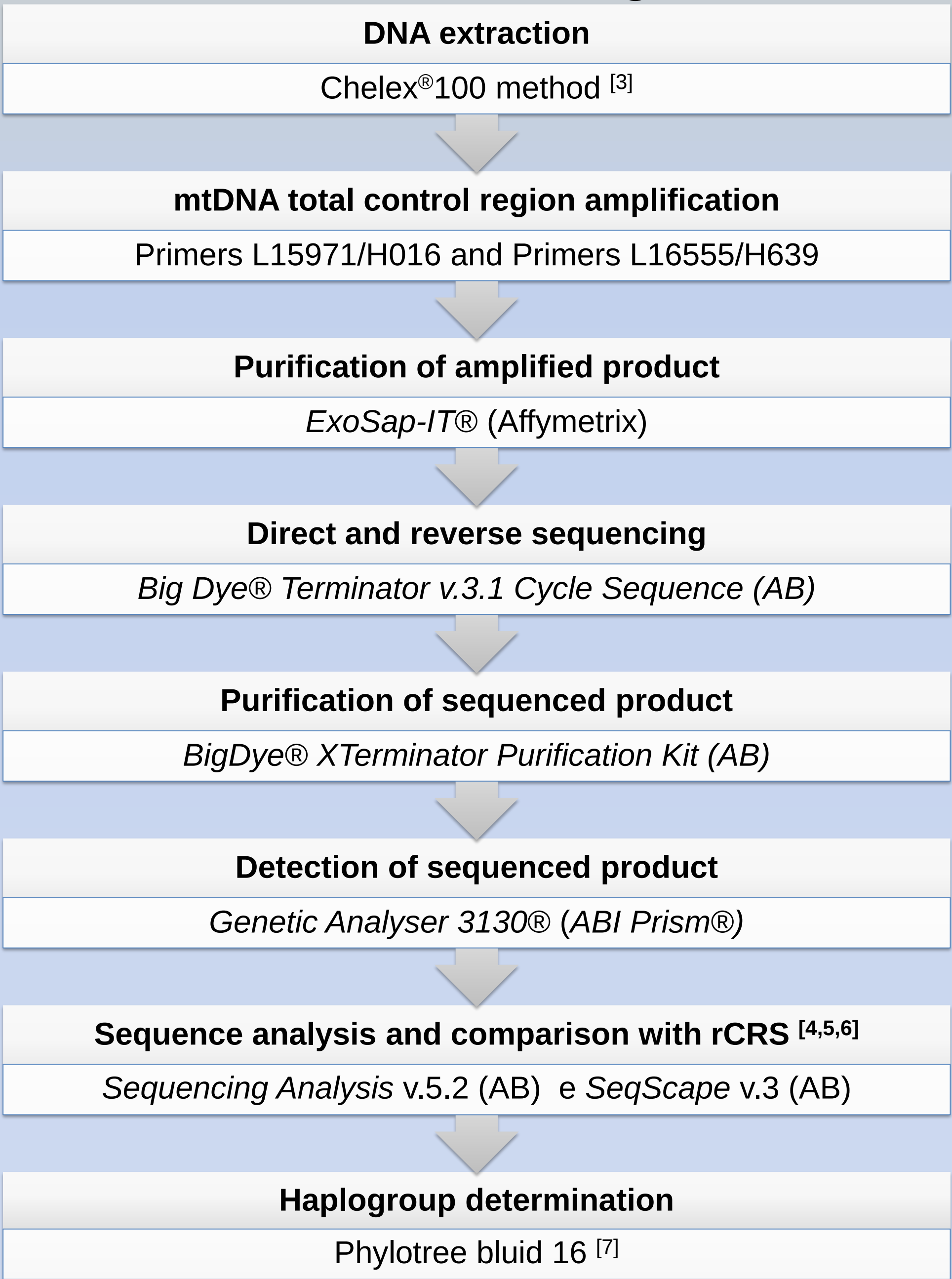


INTRODUCTION

Guiné-Bissau, officially known as the Republic of Guiné-Bissau, is a country on the west coast of the African Continent. Colonized in the nineteenth century, Guiné-Bissau was the first Portuguese colony in Africa with independence recognized by Portugal. Before the arrival of Europeans and until the seventeenth century, almost all of the territory of Guiné-Bissau was part of the Kingdom of Gabu, part of the Mali Empire. In the late seventies, migration flows, related to the post-colonial phase, led to Guinean community became the sixth largest immigrant community in Portugal. Most of those immigrants are based in Lisboa metropolitan region. Those individuals have contributed to increased heterogeneity in social, cultural, religious, linguistic and anthropological frame in Portugal. In recent decades the mtDNA became an important genetic marker in human population studies as well as in forensic studies. The interest in the analysis of mtDNA is explained by the characteristics of the molecule, as high copy number per cell in the same individual, maternal inheritance, absence of recombination and high mutation rate. Therefore, unlike nuclear DNA, mtDNA does not get shuffled every generation, so it is presumed to change at a slower rate, which is useful for the study of human evolution. The main goal of our study was to determine the haplotypes and respective haplogroups of Guineans individuals living in Lisboa, to be possible to obtain the mtDNA genetic structure of the population under study and evaluate the impact of immigrant individuals in the Lisboa region.

MATERIALS AND METHODS

In the present study, the entire control region mtDNA was sequenced and analyzed, from blood samples of 80 individuals from Guiné-Bissau living in Lisboa.

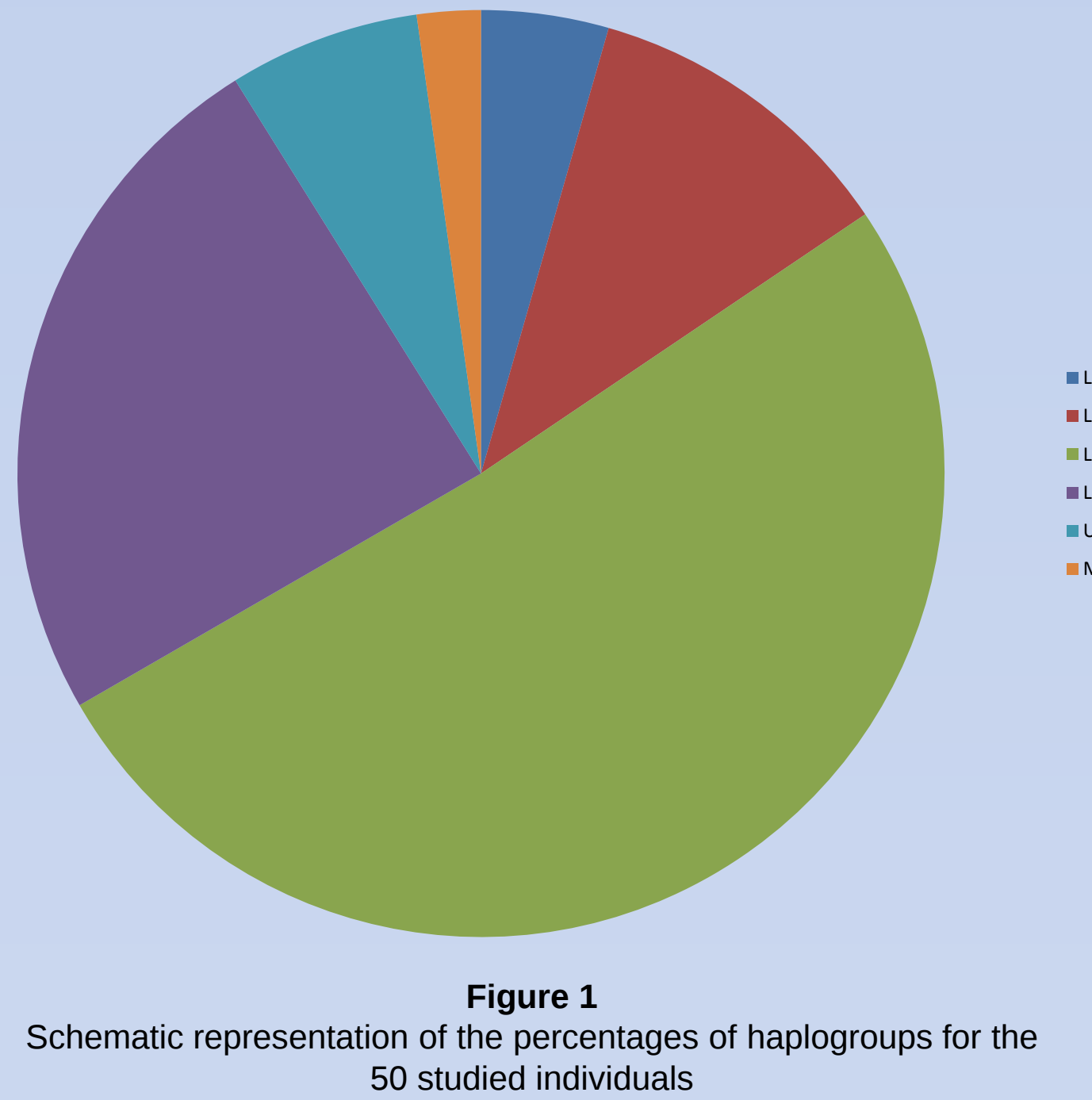


CONCLUSION

From our results, it is possible to confirm that this population of Guiné-Bissau living in Lisboa presents a high number of unique haplotypes, most of them belonging to haplogroups from Sub-Saharan regions of Africa. The results obtained in our study suggest that the genetic composition of Guiné-Bissau immigrant population presents a high genetic diversity. Those haplogroups, typical of Sub-Saharan region, will probably, in future, introduce genetic diversity in Lisboa population. As the result of the integration of African immigrants in Lisbon population we will have, in a near future, individuals borned in Portugal with Portuguese nationality exhibiting mtDNA haplotypes typical of regions of the African Continent.

RESULTS

Between the 80 individuals analysed, 73 were characterized with haplotypes belonging to macrohaplogroup L (characteristic of African regions); 4 characterized with haplotypes belonging to haplogroup U6, 1 with a haplotype of the haplogroup U5, and 1 with a haplotype of the to haplogroup M1 (figure 1).



According to EMPOPall_R11 filter[8] there are no mutations in this samples unobserved in the set of EMPOP data. It was verified that 26 haplotypes from our sampling had no coincidence on EMPOP Forensic data. Still, the most common haplotype showed the highest number of coincidences and belong to haplogroup L1.

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