

# MTDNA HAPLOGROUP FREQUENCIES IN FOUR BALKAN POPULATIONS FROM BULGARIA (BULGARIANS AND KARAKACHANI), REPUBLIC OF MACEDONIA (ETHNIC ALBANIANS) AND SERBIA

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In order to complete the information about phylogenetics of Balkan populations, mtDNA haplogroup frequencies were determined in ethnic Karakachani (from Bulgaria), ethnic Bulgarians, Albanians (from Skopje, Republic of Macedonia), and Serbs. We observed that the haplogroup frequencies were in the same range as for other Balkan populations reported. The results of the Neighbour-joining tree and of the Principal component analysis did not show closer genetic relationships between the Karakachani and the Aromanians. The Aromanians do not represent a uniform group of populations. The AMOVA method revealed significant differences between Aromanians (irrespective of inclusion of Karakachani) and other Balkan populations. It is assumed that Karakachani and Aromanians may be remainders of a basic Balkan population, and that they acquired different genetic marker frequencies by isolation and genetic drift during the past.

**Key words:** Karakachani, Bulgarians, Serbs, Albanians, Aromanians, mtDNA haplogroup frequencies.

## INTRODUCTION

The Karakachani (Greek: Sarakatsani) and the Aromanians or Vlachs comprise two of the population minorities of the Balkans. The Karakachani are a group of

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