

Variation of Rhesus Haplotype Frequencies in North Africans and in Worldwide Population Analyses

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ABSTRACT The Rhesus (Rh) blood group system is one of the most highly polymorphic genetic systems used in the investigation of human genetic relationships. In this paper the researchers aimed to expand the determination of the Rh haplotype frequencies in new samples from North African populations providing comparative analyses within and between these populations. A total of 771 blood samples were collected from three North African countries. Results reveal a general genetic homogeneity between North African populations when samples representative of wide areas were considered, regardless of their current linguistic status. However a significant micro-differentiation could be noted when small areas were considered. North African populations would possess a low ancient genetic sub-Saharan component. Analyses of the Rh haplotype frequency variation showed that worldwide populations represent a network of genetic relationships having adequate statistics and a general correspondence with geography coupled to historical patterns of gene flow and genetic drift influence.