

POPULATION FREQUENCIES FOR CSF1PO, TPOX, TH01, F13AO1, FES/FPS AND vWA IN SEVEN AMERINDIAN POPULATIONS FROM COLOMBIA

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The analysis of polymorphic microsatellites is relevant for forensic, paternity testing and to study genetic admixtures and the genetic relationships between populations. Colombia has the second highest number, after Brazil, of Amerindian tribes in America (around 81) followed by Mexico (68 tribes) and Venezuela (20 tribes). Contrary to other genetic markers such as HLA and blood groups, Short Tandem Repeats are not subjected to selective forces and therefore represent ideal markers for population studies.

We have carried out a pilot study in seven Amerindian populations named Cubeo, Curripaco, Desano, Tucano, Embera, Puinabe, and Nukak for six STR loci (CSF1PO, TPOX, TH01, F13AO1, FES/FPS and vWA) in order to complement studies that would help elucidate genetic relationships and migration between these tribes. The allele frequencies and other parameter of forensic importance for the 6 STR loci analyzed are presented.

Statistically significant differences were detected in allele frequencies when compared the Amerindian populations with the Caucasian-Mestizo and Black populations of Colombia. In addition, a limited number of alleles were detected for all loci analyzed; despite this finding, the heterozygosity level was comparable to that observed in Caucasian-Mestizo and Black populations.

These results will complement our studies correlating linguistic affiliation, genetic relationships, admixture and migration patterns in the Amerindian population of Colombia.

