B34   Population Data on 9 DNA Loci in Qatari

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The objective of this presentation is to provide results and statistical parameter of forensic interest (H, PD, PE, PIC) of the Qatari population for 9 DNA loci with evaluation of the forensic, anthropological/genetic applications in the studied population.

The analyzed DNA loci: HLADQα, D1S80, VWA, F13A01, F13B, CSF1PO, TPOX, TH01, and FES/FBS using polymerase chain reaction (PCR) with several different analytical and detection methods

This study presents data on genotypes distribution, alleles frequencies, allelic diversity (H), power of discrimination (PD), chance of paternity exclusion (PE), and polymorphism information content (PIC). Blood samples of 200 healthy unrelated Qatari were collected, and DNA was extracted using phenol-chloroform extraction procedure. HLADQ? locus was analyzed using hybridization to allele specific oligonucleoid probes in a reverse dot blot format, VNTR (D1S80) locus and STRs (VWA, F13A01, F13B, CSF1PO, TPOX, TH01, and FES/FBS) loci were analyzed using polyacrylamide gel electrophoresis. Denaturing gels were used for the STRs. All the 9 loci showed no deviation from Hardy-Weinberg equilibrium (HWE).

In conclusion, the studied DNA loci found to be very highly polymorphic valuable markers for forensic identity, paternity, and anthropological/genetic applications.

DNA, Qatari, Population Genetics

Locus	PD	PE	PIC
HLADQα	0.9321	0.6090	0.7735
D1S80	0.9137	0.5901	0.8863
VWA	0.9290	0.6010	0.7657
F13A01	0.9066	0.5480	0.7315
F13B	0.7761	0.5060	0.6985
CSF1PO	0.8855	0.4990	0.6917
TPOX	0.8450	0.4290	0.6219
TH01	0.9170	0.5670	0.7454
FES/FBS	0.8736	0.4750	0.6698
Total	< 0.9999999	< 0.9999999	< 0.9999999