

For the Record

Distribution of Amplified Fragment Length Polymorphism D1S80 Alleles in a Saudi Arabian Population

Mohammad A. Tahir, Ph.D.¹, Sudhir K. Sinha, Ph.D.¹,
Nahedh A-AL-Kubaidan, B.S.³, Usman A. Tahir⁴,
Bruce Budowle, Ph.D.⁵, and Muhammad Amjad, Ph.D.¹

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Blood samples from 220 unrelated individuals from the Riyadh area in Saudi Arabia were collected in EDTA tubes. Liquid blood was deposited onto cotton swatches and dried at room temperature. The stains were stored at -20°C until analyzed. DNA was extracted by phenol/chloroform/isoamyl alcohol method (1).

Amplifications and typing of D1S80 locus were carried out using a standard protocol (2). Approximately 10 ng of genomic DNA template was used. Amplifications were carried out using a DNA Thermalcycler, model 480 (Perkin-Elmer Corporations, Foster City, CA). Electrophoresis was performed on a SA 32 vertical gel electrophoresis unit (Gibco-BRL, Gaithersburg, MD), using geneamp detection gel, (Perkin-Elmer Corporation, Foster City, CA). Allele frequency calculation and tests for Hardy-Weinberg equilibrium (HWE) were performed as previously described (1).

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¹ Indianapolis-Marion County Forensic Services Agency, 40 South Alabama Street, Indianapolis, IN.

² Relia Gene Technologies, 5525 Mounes Street, Suite #101, New Orleans, LA.

³ Public Security/Forensic Department, Riyadh, Saudi Arabia.

⁴ Wabash College, Crawfordsville, IN.

⁵ Forensic Science Research and Training Center, FBI Academy, Quantico, VA.

TABLE 1—D1S80 allele frequencies in Saudi Arabian population.

Observed		
Allele	Number	Frequency (%)
15	2	0.909
17	3	1.364
18	31	14.091
20	1	0.455
21	3	1.364
22	7	3.182
23	2	0.909
24	121	55.000
25	7	3.182
26	4	1.818
27	2	0.909
28	10	4.545
29	21	9.545
31	5	2.273
34	1	0.455
Total	220	100.00

Observed homozygosity = .0309, Expected homozygosity = 0.334, Homozygosity test ($P = 0.579$), Exact test ($P = 0.071$). Power of discrimination (PD). Observed = 0.857, Expected = 0.865. Power of Exclusion (PE) 0.474.

References

- Budowle B, Baechtel F, Samerick J, Presley K, Giusti A, Parson G, et al. D1S80 population data in African Americans, Caucasians, Southeastern Hispanics, Southwestern Hispanics, and Orientals. *J Forensic Sci* 1995;40:38-44.
- AmpliFLPD1S80 kit user's manual, Perkin-Elmer Corp., Foster City, CA.

Additional information and reprint requests:

Mohammad A. Tahir, Ph.D.
Indianapolis-Marion County Forensic Services Agency
40 S. Alabama Street
Indianapolis, IN 46236