

For the Record

Allele Frequencies for Four STR Loci (D16S539, TH01, TPOX, and CSF1PO) in African American and Caucasian Populations from Marion County, Indiana, USA

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Population: African American ($n = 190$); Caucasian ($n = 170$).

Keywords: forensic science, DNA typing, short tandem repeat, polymerase chain reaction, population genetics, Marion County, Indiana, D16S539, TH01, TPOX, CSF1PO

Whole blood obtained by venipuncture was collected in EDTA vacutainer tubes from unrelated individuals residing in Marion County, Indiana. The DNA was extracted by phenol chloroform method (1) and purified by ethanol precipitation and/or by Centricon[®] concentrators (Amicon Corporation, Beverly, MA). The

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quantity of extracted DNA was estimated using the slot-blot procedure using commercial kits (Gibco-BRL, Gaithersburg, MD). PCR amplification was performed using the AmpF ℓ STR Cofiler[™] PCR amplification kit (PE-Biosystems, Foster City, CA) following the manufacturer's protocol. The amplified products were separated and detected using the ABI Prism[™] 377 DNA sequencer and/or ABI Prism[™] 310 Genetic analyzer (PE-Biosystems, Foster City, CA). The data were analyzed using a program written by Chakraborty and Zhong. The allele frequencies of the four loci studied are given in Table 1.

The allele frequency data of D3S1358, vWA, FGA, D8S1179, D21S11, D18S51, D5S818, D13S317, and D7S820 loci for these two population samples were published elsewhere (2).

The complete data are available to any interested researcher upon request.

References

1. Comey CT, Koons BW, Presley KW, Smerick JB, Sobieralski CA, Stanley DM, et al. DNA extraction strategies for amplified fragment length polymorphism analysis. *J Forensic Sci* 1994;39:1254-69.
2. Balamurugan K, Budowle B, Tahir MA. Allele frequencies for nine STR loci in African American and Caucasian populations from Marion County, Indiana, USA. *J Forensic Sci* 2000;45(3):744-6.

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TABLE 1—STR allele frequency data for African American and Caucasian populations.

Allele	African American ($n = 190$)				Caucasian ($n = 170$)			
	D16S539	TH01	TPOX	CSF1PO	D16S539	TH01	TPOX	CSF1PO
5	...	0.0053	...	...	...	0.0029	...	...
6	...	0.1368	0.0556	0.0026	...	0.2382	0.0029	...
7	...	0.3579	0.0053	0.0421	...	0.1912	...	0.0029
8	0.0237	0.2132	0.3466	0.0711	0.0118	0.1059	0.5353	0.0029
9	0.2579	0.1684	0.2196	0.0342	0.0794	0.1088	0.1441	0.0206
9.3	...	0.1053	...	...	...	0.3353	...	...
10	0.1474	0.0132	0.1111	0.2526	0.0735	0.0177	0.0559	0.2500
11	0.2447	...	0.2381	0.2263	0.2618	...	0.2206	0.3265
12	0.1737	...	0.0238	0.2895	0.3500	...	0.0412	0.2882
13	0.1263	...	...	0.0632	0.1824	...	...	0.0882
14	0.0237	...	...	0.0184	0.0382	...	...	0.0147
15	0.0026	...	...	...	0.0029	...	...	0.0029
>15	...	...	...	...	...	...	...	0.0029
Exact test values*	0.484	0.537	0.677	0.171	0.749	0.201	0.221	0.391
PD	0.927	0.911	0.903	0.919	0.905	0.904	0.816	0.892
PE	0.612	0.557	0.539	0.591	0.550	0.558	0.403	0.501

* Exact test based pm 2000 shufflings.

... Allele not detected in this study.