

For the Record

Gene Frequencies for Four Hypervariable DNA Loci in a Chilean Population of Mixed Ancestry*

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Population: Amerindian and Caucasian Ancestral Mix

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Blood samples were collected in tubes containing ACD from 150 unrelated blood donors at the blood bank of the Hospital San José, in the northern part of Santiago, Chile. DNA was extracted by the organic method described by Comey (1). The three commercial STR loci were amplified using 1 ng of DNA for each PCR reaction, and the fragments electrophoresed through 6% acrylamide gels and silver stained, according to the manufacturer's recommendations (2). Amplification and typing of the D1S80 locus was carried out according to the methods described by Budowle et al. (3). The gene

frequencies were calculated by simple counting, and the unbiased heterozygosity was estimated according to methods described previously (4,5). The expected and observed gene frequencies were compared using a homogeneity χ^2 test (5,6).

Table 1 summarizes the frequencies. The complete data set is available to any interested research upon request.

References

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TABLE 1—Gene frequencies and Hardy-Weinberg equilibrium for the D18S849, D3S1744, D12S1090, and D1S80 loci.

	D12S1090	D3S1744	D18S849	D1S80
Homozygotes	12	29	42	32
Heterozygotes	134	119	107	120
Total	146	148	149	152
Allele	Frequency	Frequency	Frequency	Frequency
9	0.072			
10	0.017			
11	0.048			
12	0.062			
13	0.017		0.003	
14	0.024	0.003	0.034	
15	0.014	0.108	0.255	
16	0.007	0.098	0.389	
17	0.003	0.172	0.232	0.003
18	0.021	0.331	0.081	0.240
19	0.051	0.155	0.006	0.003
20	0.065	0.104		0.026
21	0.051	0.026		0.030
22	0.110	0.003		0.027
23	0.089			0.013
24	0.072			0.332
25	0.072			0.066
26	0.103			0.007
27	0.051			0.010
28	0.024			0.049
29	0.017			0.023

TABLE 1—Continued.

	D12S1090	D3S1744	D18S849	D1S80
30				0.046
31	0.007			0.086
32	0.003			0.007
33				0.003
34				0.020
36				0.003
37				0.003
39				0.003
	1.000	1.000	1.000	1.000
% of observed homozygosity	8.22	19.59	27.79	21.05
% of expected homozygosity	6.70	19.63	27.79	18.78
computed X^2	0.54	0.00	0.00	0.51