

FOR THE RECORD

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HLA-DQA1 and Polymarker Allele Frequencies in Peru

POPULATION: Peru

KEYWORDS: forensic science, DNA typing, HLA-DQA1, LDLR, GYPA, HBGG, D7S8, GC, population genetics, Peru

Whole blood samples were obtained after informed consent from 100 unrelated Peruvian donors. Genomic DNA was extracted by a standard phenol/chloroform extraction procedure. The extracted DNA was quantitated by slot-blot hybridization using the Quantiblot^R Human DNA Quantitation kit (PE-Biosystems, Foster City, CA). The samples were typed for HLA-DQA1/PM loci by using the Amplitype PM and DQA1 kit following manufacturer's instructions (PE-Biosystems, Foster City, CA). Exact tests were performed by using the computer program GDA for checking the Hardy-Weinberg expectations (1). Data were analyzed by Power-

Stats (2). The complete data set is available to any interested researcher upon request from Oscar Garcia, Ph.D., Area de Laboratorio Ertzaintza, Av. Montevideo 3, 48002-Bilbao, Spain.

References

1. Lewis PO, Zaykin D. Genetic data analysis: Computer program for the analysis of allelic data. Version 1.0 (d16c). 2001.
2. Tereba A. Tools for analysis of population statistics. Promega Corporation. Profiles in DNA 1999;(2):14-6.

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TABLE 1—Observed allele frequencies for HLA-DQA1/PM loci in Peru.

N = 100	HLA-DQA1	
	Allele	Frequency
	1.1	0.0450
	1.2	0.0550
	1.3	0.0300
	2	0.0500
	3	0.4250
	4.1	0.2350
	4.2/4.3	0.1600
H	0.7600	
PD	0.8849	
CE	0.5270	
P*	0.4275	
P**	0.4965	

N	LDLR		GYPA		HBGG			D7S8		GC		
	A	B	A	B	A	B	C	A	B	A	B	C
100	0.5850	0.4150	0.6900	0.3100	0.2700	0.7150	0.0150	0.6050	0.3950	0.1800	0.2500	0.5700
H	0.4700		0.4600			0.3400		0.4500			0.6300	
PD	0.6242		0.5704			0.5888		0.6242			0.7500	
CE	0.1626		0.1548			0.0814		0.1474			0.3284	
P*	0.8265		0.4895			0.1465		0.6700			0.5390	
P**	0.8215		0.6415			0.1095		0.7220			0.7705	

H (observed heterozygosity), PD (Power of discrimination), CE (a priori chance of exclusion), P* (Hardy-Weinberg equilibrium, Chi square test), P** (Hardy-Weinberg equilibrium, exact test based on 2000 shufflings).