

FOR THE RECORD

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Allele Distributions for D21S1435 and D21S2055 Loci in Two Chinese Populations

POPULATIONS: Unrelated people of Han population living in Chengdu, Hui population living in Gansu, China

KEYWORDS: forensic science, DNA typing, population genetics, short tandem repeats, D21S1435, D21S2055, China

Blood specimens were collected from unrelated volunteer donors. DNA was extracted from blood specimens using Chelex-100 (1). DNA typing was carried out by PCR. The components of PCR were: target DNA 20 ng, primer 0.2 $\mu\text{mol/L}$, dNTPs 200 $\mu\text{mol/L}$, KCl 50 $\mu\text{mol/L}$, Tris-HCl (pH 8.3) 10 mmol/L, MgCl_2 1.5 mmol/L, Taq 1U. Primer sequences: D21S1435: 5'-CCC TCT CAA TTG TTT GTC TAC C-3', 5'-ATG GCA CTG AAA TCT CTT GC-3'; D21S2055: 5'-AAC AGA ACC AAT AGG CTA TCT ATC-3', 5'-TCT CCT ACC AAG TGA TTT ACT GTA-3'.

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PCR conditions: D21S1435: start at 94°C for 3 min, 30 cycles consist of 35s at 94°C, 45s at 61°C, 55s at 72°C followed by a 5 min extension at 72°C. D21S2055: start at 94°C for 3 min, 30 cycles consist of 35 s at 94°C, 45 s at 61°C, 55 s at 72°C followed by a 5 min extension at 72°C. The amplified products were electrophoresed in 6% polyacrylamide gel by using 100 bp ladder and allelic markers for both D21S1435 and D21S2055 as size marker, followed by sliver staining. Data were analyzed by The Promega Software, POWERSTATS. Calculating of Chi-square test was carried out for Hardy-Weinberg equilibrium test.

The complete data set can be accessed at <http://www.meiyun@public.sc.cninfo.net>.

Reference

1. Singer-Sam J, Tanguary RL, Riggs AD. Use of Chelex to improve the PCR signal from a small number of cells. *Amplification* 1989;3:11.

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TABLE 1—Allele frequency distributions of two STR loci, D21S1435 and D21S2055.

Alleles	D21S1435		D21S2055		Alleles	D21S1435		D21S2055	
	Han <i>n</i> = 112	Hui <i>n</i> = 106	Han <i>n</i> = 126	Hui <i>n</i> = 107		Han <i>n</i> = 112	Hui <i>n</i> = 106	Han <i>n</i> = 126	Hui <i>n</i> = 107
14			0.095	0.126	27			0.016	0.009
15			0.008	0.014	28			0.008	0.019
16	0.094	0.104	0.000	0.019	29			0.044	0.056
17	0.250	0.288	0.000	0.009	30			0.063	0.047
18	0.268	0.264	0.000	0.009	31			0.071	0.084
19	0.254	0.269	0.004	0.000	32			0.075	0.033
20	0.089	0.061	0.012	0.009	33			0.004	0.009
21	0.045	0.014	0.044	0.033	34			0.024	0.000
22			0.222	0.150	35			0.000	0.009
23			0.210	0.210	DP	0.905	0.884	0.966	0.969
24			0.056	0.047	H	0.821	0.857	0.770	0.869
25			0.028	0.056	PE	0.639	0.693	0.544	0.733
26			0.016	0.051	PIC	0.750	0.720	0.860	0.890

TABLE 2—Genotypes of D21S1435 and D21S2055.

Genotypes	Han		Hui		Genotypes	Han		Hui	
	D21S2055	D21S1435	D21S2055	D21S1435		D21S2055	D21S1435	D21S2055	D21S1435
14-14	1		4		21-25	1		0	
14-16	0		1		21-29	1		0	
14-17	0		1		21-31	1		1	
14-18	0		1		22-22	10		2	
14-20	0		1		22-23	11		5	
14-22	5		2		22-24	1		1	
14-23	5		4		22-25	2		5	
14-24	2		3		22-26	1		1	
14-25	2		0		22-29	4		3	
14-26	1		0		22-30	4		3	
14-27	0		1		22-31	3		2	
14-29	1		0		22-32	2		1	
14-30	2		1		23-23	7		4	
14-32	3		1		23-24	3		2	
14-33	0		1		23-25	2		1	
14-34	1		0		23-26	0		6	
14-35	0		2		23-27	3		0	
15-22	0		3		23-28	0		1	
15-31	1		0		23-29	1		0	
15-32	1		0		23-30	3		4	
16-16	0	2	0		23-31	4		9	
16-17	0	6	0	9	23-32	5		4	
16-18	0	8	1	9	23-33	1		0	
16-19	0	2	0	2	24-24	3		0	
16-20	0	0	0	2	24-29	0		1	
16-21	0	1	0	0	24-31	0		1	
16-31	0		2		25-25	0		2	
17-17	0	3	0	5	25-26	0		2	
17-18	0	18	0	20	26-27	1		0	
17-19	0	19	0	16	26-29	0		1	
17-20	0	5	0	4	26-33	0		1	
17-21	0	2	0	2	26-34	1		0	
17-22	0		1		27-32	0		1	
18-18	0	7	0	2	28-29	0		1	
18-19	0	14	0	18	28-31	1		1	
18-20	0	5	0	4	28-34	1		0	
18-21	0	1	0	1	29-29	1		1	
19-19	0	7	0	9	29-30	0		2	
19-20	0	5	0	3	29-31	2		2	
19-21	0	3	0	0	30-30	3		0	
19-31	1		0		30-32	1		0	
20-20	1	1	0	0	31-31	1		0	
20-21	0	3	0	0	31-32	2		0	
20-28	0		1		32-32	1		0	
20-31	1		0		32-34	3		0	
21-21	1		1		N	126	112	107	106
21-22	3		1		HWE	14.20	4.63	23.37	10.23
21-23	1		1		df	14	10	14	9
21-24	2		2		P		>0.05		