FOR THE RECORD

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Allele Frequency Distribution of the STR Locus D20S161 in Indonesians, Tibetans, South African Blacks and South African Whites

POPULATION: 105 Indonesians, 60 Tibetans, 101 South African blacks and 100 South African whites

KEYWORDS: forensic science, DNA typing, D20S161, Indonesian, Tibetan, South African black, South African white

Blood samples were collected from 105 unrelated Indonesian individuals living in Surabaya (east region of Java Island), 60 unrelated Tibetan individuals in Katmandu (capital of Nepal), 101 unrelated South African black individuals living in Cape Town (south region of South Africa) and 100 unrelated South African white individuals living in Cape Town. DNA isolation, PCR amplification, detection systems and allele nomenclature for the D20S161 locus have been described in our previous reports (1,2).

During the later sequence analysis of D20S161, we have found out an error in counting the amplified fragment size and the number of repeat motifs. In the present study, genotypes were classified according to the corrected nomenclature (3). The allele frequencies and several statistical parameters of D20S161 in Indonesians, Ti-

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betans, South African blacks and South African whites are shown in Table 1. The distribution did not deviate from the Hardy-Weinberg equilibrium in all the above four populations. In two Indonesian individuals and one South African black individual, we detected a new allele 22.

The complete data set is available to any interested researcher upon request.

References

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Previous Allele	Correct Allele	Repeat Number	Fragment Size (bp)	Population			
				Indonesians $(n = 105)$	Tibetans $(n = 60)$	South African blacks $(n = 101)$	South African whites $(n = 100)$
14	13	13	166	0	0	0.094	0.005
16	15	15	174	0.033	0.025	0	0.020
17	16	16	178	0.143	0.192	0.119	0.185
18	17	17	182	0.238	0.417	0.307	0.455
19	18	18	186	0.300	0.125	0.198	0.205
20	19	19	190	0.224	0.167	0.139	0.080
21	20	20	194	0.033	0.075	0.099	0.050
22	21	21	198	0.019	0	0.040	0
	22	22	202	0.010	0	0.005	0
Hardy-Weinl	berg equilibrium	(<i>P</i>)					
Exact test				0.413	0.263	0.821	0.578
Likelihood ratio test			0.277	0.322	0.870	0.520	
Statistical pa	rameters						
H-obs			0.819	0.667	0.811	0.700	
H-exp \pm SE			0.781 ± 0.040	0.738 ± 0.057	0.813 ± 0.039	0.708 ± 0.045	
MEC				0.571	0.526	0.634	0.481
PIC				0.747	0.637	0.789	0.679
PD			0.836	0.896	0.938	0.869	

 TABLE 1—Correct designation of D20S161 alleles, allele frequencies and statistical parameters in Indonesians, Tibetans, South African blacks and South African whites.

H-obs = observed heterozygosity, H-exp = expected heterozygosity, MEC = mean exclusion chance, PIC = polymorphic information content, PD = power of discrimination.