FOR THE RECORD

Distribution of HLA-DQA1 and Amplitype PM Locus Alleles in a Saudi Arabian Population Sample

Mohammad A. Tahir,¹ Ph.D.; Sudhir Sinha,² Ph.D.; Carol Rogers,³ M.S.; Usman Tahir,⁴ Kuppareddi Balamurugan,¹ Ph.D.; Nahedh A. Al-Kubaidan,⁵ B.S.; Abdul Rauf Choudhry,⁶ M. Phil.; Bruce Budowle,⁷ Ph.D.; and Muhammad Amjad,¹ Ph.D.

Blood samples were collected in EDTA coated vacutainers from 207 unrelated patients who visited the King Khaled University Hospital and Security Force Hospital in Riyadh, Saudi Arabia. Blood saturated cotton swatches were prepared from these samples and dried at room temperature. DNA was extracted from the

¹ Marion County Forensic Services Agency, Indianapolis, 40 S. Alabama Street, Indianapolis IN 46204.

³ Dept. of Forensic Sciences, Univ. of Strathclyde, Glasgow, Scotland, UK.

⁴ Lawrence Central High School, Indianapolis, IN.

⁵ Public Security/Forensic Dept., Riyadh, Saudi Arabia.

⁶ College of Medicine Research Center, Riyadh, Saudi Arabia.

⁷ Forensic Science Research and Training Center, Quantico, VA.

swatches by organic extraction (phenol/chloroform/isoamyl alcohol) followed by ethanol precipitation (1). The quantity of DNA was determined using the Quantiblot kit.

The samples were typed for HLA-DQA1/PM loci using the Amplitype PM + DQA1 kit (Perkin Elmer, Foster City, CA) as per the manufacturer's instructions.

Genotypic data in the test sample were used to calculate frequency of each allele. Tests for independence were performed using the DNA typing program written by Chakraborty and Zhong (2). The data set is available if requested.

References

- Sambrook J, Fritsch EF, Maniatis T. Molecular cloning. A laboratory manual. 2nd Ed. Cold Spring Harbor NY: Cold Spring Harbor Laboratory Press, 1989.
- Chakraborty R, Zhong Y, Stivers D. DNAtype for windows 95/NT. Human Genetics Center, School of Public Health, University of Texas Health Sciences Center, Houston, Texas. 1998.

Additional information and reprint requests: Mohammad A. Tahir, Ph.D. Indianapolis-Marion County Forensic Services Agency 40 S. Alabama Street Indianapolis, IN 46204.

		Frequency			Frequency
Locus	Allele	(n = 83)	Locus	Allele	(n = 207)
LDLR	А	0.516	HLA-DQA1	1.1	0.082
	В	0.484	-	1.2	0.188
GYPA	А	0.754		1.3	0.089
	В	0.246		2	0.193
HBGG	А	0.391		3	0.169
	В	0.587		4	0.278
	С	0.022			
D7S8	А	0.634			
	В	0.366			
GC	А	0.145			
	В	0.189			
	С	0.667			

 TABLE 1—Observed HLA-DQA1 and PM allele frequencies in Saudi

 Arabian population.

n—number of individuals typed.

TABLE 2–	-Summary	of	Hardy-	Weinberg	tests.
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	LDLR	GYPA	HBGG	D7S8	GC	HLA-DQA1 $(n = 207)$
Observed						
Homozygosity	45.9%	65.0%	50.8%	54.1%	45.9%	16.4%
Expected						
Homozygosity (Unbiased)	45.9%	62.8%	49.7%	53.5%	50.0%	19.1%
Homozygosity						
Test*	0.277	0.535	0.759	0.862	0.272	0.321
Exact Test*	0.297	0.425	0.946	0.882	0.141	0.482

* Probability values. n = 183 for LDLR, GYPA, HBGG, D7S8, and Gc.

² Relia Gene Technologies, Inc., New Orleans, LA.