

## FOR THE RECORD

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# Allele Frequency Distribution of PowerPlex 1.2 and Profiler Plus Short Tandem Repeats (STR) Loci in Egyptian Population

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**POPULATION:** Egyptian

**KEYWORDS:** forensic science, DNA typing, population genetics, STR, Egypt

Blood samples were collected from 176 unrelated Egyptian individuals in EDTA-coated vacutainer tubes. Of these, 148 individuals were Muslims and 28 Christian. Informed consent was obtained at the time of blood collection. DNA was extracted by organic extraction (Phenol/chloroform/Isoamyl alcohol) followed by ethanol precipitation (1). The quantity of DNA was determined using ACES 2.0 quantiblot kit (GIBCO-BRL Gaithersburg, MD). Promega PowerPlex 1.2 and PE Profiler Plus kits were used to amplify DNA from the Muslim and Christian populations, respectively. Amplified products were electrophoresed on an ABI 310 Genetic Analyzer (ABI Systems, Foster City, CA). Data were ana-

lyzed using DNA typing program written by Chakraborty and Zhong (2).

The complete data set is available to any interested researcher upon request from M. Amjad, Ph.D. at [mamjad@indygov.org](mailto:mamjad@indygov.org)

## References

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

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TABLE 1—*Allele frequencies in the Egyptian population (n = 148)—Power Plex 1.2.*

Allele	D5S818	D13S317	D7S820	D16S539	vWA	TH01	TPOX	CSF1PO
4					0.336			
6					21.4777			
7			1.342			20.134	0.336	1.014
8	1.007	17.450	17.785	1.678		11.745	49.329	0.676
9	7.047	4.362	13.087	19.128		36.242	15.436	2.027
9.3	0.000	0.000	0.000	0.336		7.718	0.000	0.000
10	14.094	3.691	34.228	8.054		2.013	8.725	32.095
11	22.483	27.852	19.799	33.221		0.000	23.490	26.014
12	34.564	30.201	12.081	21.141	0.336	0.000	2.685	31.757
13	20.134	13.087	1.678	13.423	0.336	0.000		5.743
14	0.671	3.356		2.349	9.060	0.000		0.676
15				0.671	11.074	0.000		
16					21.141	0.336		
17					27.852			
18					20.805			
19					8.054			
20					1.342			
Exact Test	0.305	0.740	0.439	0.367	0.215	0.962	0.782	0.479
P.D.	0.90737	0.91787	0.91918	0.92065	0.93471	0.90734	0.84378	0.87299
P.E.	0.907	0.917	0.919	0.921	0.935	0.907	0.844	0.872

TABLE 2—*Allele frequencies in the Christian Egyptian population (n = 28)—Profiler Plus.*

Allele	D3S1358	vWA	FGA	D8S1179	D21S11	D18S51	D5S818	D13S317	D7S820
8							3.571	10.714	14.286
9							5.357	8.929	8.929
10							10.714	7.143	39.286
11				16.071		1.786	28.571	25.000	17.857
12				14.286		14.286	26.786	30.357	17.857
13		3.571		30.357		14.286	25.00	10.714	1.786
14		5.357		16.071		16.071		7.143	
15	26.786	10.714		19.643			12.500		
16	30.357	19.643		3.571			19.643		
17	30.357	25.000					8.929		
18	12.500	23.214	1.786				7.143		
19		5.357	1.786				0.000		
20		3.571	3.571				3.571		
21		3.571	12.5				1.786		
21.2			1.786						
22			7.143						
23			25.00						
23.3			1.786						
24			25.000						
25			10.714						
26			7.143						
27			0.000						
28			1.786		14.286				
29					33.929				
30					19.643				
31					5.357				
31.2					12.500				
32.2					12.500				
34.2					1.786				
Exact Test	0.405	0.199	0.010	0.207	0.819	0.488	0.766	0.598	0.006
P.D.	0.87103	0.86805	0.77982	0.89940	0.88321	0.79143	0.89762	0.89928	0.87479
P.E.	0.871	0.868	0.780	0.900	0.883	0.791	0.8980	0.900	0.875