

DNA profiling of Hungarian King Béla III and other skeletal remains originating from the Royal Basilica of Székesfehérvár

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ESM 4 Self-designed PCR primers used for the autosomal and Y-chromosomal STR amplifications in the Budapest and the Göttingen laboratories

1. Autosomal STR loci, primer sequences and concentrations in tetraplex and simplex PCRs used by the Budapest laboratory

STR locus	Primer sequence (5'→3')	Fluorescent dye	μM in tetraplex	μM in simplex
D2S441	CTG TGG CTC ATC TAT GAA AAC TT TAA GTG GCT GTG GTG TTA TGA T	VIC	0.16 0.16	0.4 0.4
vWA	CCC TAG TGG ATG ATA AGA ATA ATC AGT ATG GGA CAG ATG ATA AAT ACA TAG GAT GGA TGG ^a	VIC	0.26 0.26	
D10S1248	TTA ATG AAT TGA ACA AAT GAG TGA G ACA ACT CTG GTT GTA TTG TCT TCA T	NED	0.26 0.26	
TH01	GTG ATT CCC ATT GGC CTG TTC TCC TGT GGG CTG AAA AGC TC	NED	0.14 0.14	
D3S1358	ACT GCA GTC CAA TCT GGG T ATG AAA TCA ACA GAG GCT TGC ^b	6-FAM		0.4 0.4

^aUrquhart et al. 1995; ^bKrenke et al. 2002

2. Amplified loci with primer sequences of the decaplex Y-miniSTR kit used by the Göttingen laboratory

Y-STR locus	Primer sequence (5'→3')	Fluorescent dye	μM in PCR
DYS389	ATC CAA CTC TCA TCT GTA TTA TCT ATG T GAC TGC TAG ATA AAT AGA TAG ATTG ATA GAG	6-FAM	0.4 0.4
DYS19	CTG AGT TTC TGT TAT AGT GTT TTT TAA TAT AT ATG GGT TAA GGA GAG TGT CAC TAT AT	6-FAM	0.15 0.15
DYS438	GAA TAG TTG AAC GGT AAA CAG TAT ATT T GAG TGA AAC TCC ATT TCA AAT AGA A	HEX	0.2 0.2
DYS385	AGA GAA AGA GGA AAG AGA AAG AAA G AAA AAT AAT CTA TCT ATT CCA ATT ACA TAG TC	HEX	0.4 0.4
DYS439	GGA GAC AGA TAG ATG ATA AAT AGA AGA T ACC ATC ATC TCT TTA CTT ATA CTT TCT ATC	NED	0.1 0.1
DYS393	GTG GTC TTC TAC TTG TGT CAA TAC AAA ACT CAA GTC CAA AAA ATG AGG	NED	0.15 0.15
DYS390	CAT TTT GGT ACC CCA TAA TAT ATT C AGC AAT GTG TAT ACT CAG AAA CAA G	NED	0.2 0.2
DYS392	CTA CCA ATC CCA TTC CTT AGT AAA AAG GAA AAC AAA TTT TTT TCT TGT A	ROX	0.2 0.2
DYS391	CTC TTG TGT ATC TAT TCA TTC AAT CAT A AAA TTG CCA TAG AGG GAT AGG TAG	ROX	0.2 0.2
DYS437	AGT GAT CCT CCT ACC TCA GTC TC ACC ACA GAT AAA TAT CAT TCA TAG ATA A	ROX	0.25 0.25