

CHAPTER EIGHT

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APPENDIX A

Haplogroup classification of the mitochondrial sequences of the Tswana population

This appendix consists of a list of the haplogroups and sub-haplogroups of the Tswana individuals in this study. The mitochondrial sequences were generated from a Tswana-speaking cohort of 50 individuals residing in the North-West Province of South Africa that was investigated for the purpose of this study. The mitochondrial haplogroup assignments were performed by using two (2) different haplogroup classification schemes, the Wallace classification system (2004) and the PhyloTree classification system (Van Oven and Kayser, 2009), as discussed in Section 5.12. The haplogroup and sub-haplogroups assignments of both the classification schemes are presented in Table A.1. The discrepancy between the assignments of the two classification schemes were addressed in Section 6.7.1.1.

Table A.1 List of haplogroups/sub-haplogroups of Tswana individuals in this investigation

Sequence name/isolate	Ethnic group/ geographic region	Haplogroup/ sub-haplogroup classification	
		Wallace, 2004 ^a	PhyloTree, 2009 ^b
TS_04_2082	Tswana/South Africa	L0a	L0d3
TS_13_3066	Tswana/South Africa	L0a	L0d3
TS_22_3486	Tswana/South Africa	L0a	L0d3
TS_28_4034	Tswana/South Africa	L0a	L0k
TS_35_4080	Tswana/South Africa	L0a	L0d3
TS_50_5091	Tswana/South Africa	L0a	L0d3
TS_02_2075	Tswana/South Africa	L0b	L0d1b1
TS_05_2091	Tswana/South Africa	L0b	L0d2a1
TS_07_2095	Tswana/South Africa	L0b	L0d2a1
TS_08_2097	Tswana/South Africa	L0b	L0d1b
TS_11_3002	Tswana/South Africa	L0b	L0d2
TS_12_3027	Tswana/South Africa	L0b	L0d1b
TS_17_3117	Tswana/South Africa	L0b	L0d2a1
TS_18_3236	Tswana/South Africa	L0b	L0d2a1
TS_19_3459	Tswana/South Africa	L0b	L0d2a1
TS_24_3505	Tswana/South Africa	L0b	L0d1a
TS_25_4111	Tswana/South Africa	L0b	L0d2a1
TS_27_4027	Tswana/South Africa	L0b	L0d1b
TS_29_4037	Tswana/South Africa	L0b	L0d1c
TS_31_4051	Tswana/South Africa	L0b	L0d2a1

Table A.1 Continued...

Sequence name/isolate	Ethnic group/ geographic region	Haplogroup/ sub-haplogroup classification	
		Wallace, 2004 ^a	PhyloTree, 2009 ^b
TS_32_4056	Tswana/South Africa	L0b	L0d1a1
TS_34_4075	Tswana/South Africa	L0b	L0d1a
TS_36_4083	Tswana/South Africa	L0b	L0d1b
TS_37_4089	Tswana/South Africa	L0b	L0d2a1
TS_40_4117	Tswana/South Africa	L0b	L0d1
TS_41_5044	Tswana/South Africa	L0b	L0d1a1
TS_47_5083	Tswana/South Africa	L0b	L0d2a1
TS_48_5085	Tswana/South Africa	L0b	L0d1b
TS_44_5063\$	Tswana/South Africa	L0c	L0a'b'f
TS_09_4063	Tswana/South Africa	L0c1	L0a1b
TS_21_3471	Tswana/South Africa	L0c1	L0a1b
TS_46_4032	Tswana/South Africa	L0c1	L0a1b
TS_01_2074	Tswana/South Africa	L0c2	L0a2a2a
TS_14_3075	Tswana/South Africa	L0c2	L0a2a2a
TS_33_3461	Tswana/South Africa	L0c2	L0a2a2a
TS_38_3506	Tswana/South Africa	L0c2	L0a2a2a
TS_06_2093	Tswana/South Africa	L1b1	L1c2a
TS_23_3015	Tswana/South Africa	L1b1	L1c2a
TS_03_2077	Tswana/South Africa	L2a	L2a1
TS_10_2103	Tswana/South Africa	L2a	L2a1
TS_16_3107	Tswana/South Africa	L2a	L2a1
TS_20_3466	Tswana/South Africa	L2a	L2a1
TS_26_4013	Tswana/South Africa	L2a	L2a1
TS_39_4106	Tswana/South Africa	L2a	L2a1
TS_42_5060	Tswana/South Africa	L2a	L2a1
TS_43_5062	Tswana/South Africa	L2a	L2a1
TS_45_5066	Tswana/South Africa	L2a	L2a1
TS_49_5086	Tswana/South Africa	L2a	L2a1
TS_30_3495	Tswana/South Africa	L3a3	L3e1
TS_15_3085	Tswana/South Africa	L3a3	L3d1a1a

Sequence name/isolate = the sample name given to the mitochondrial sequence under investigation; Ethnicity/geographic origin = the place of origin or the ethnicity of the individual to which the mtDNA sequence belonged the sample design of the Tswana cohort of this investigation was is discussed in Section 5.2; the prefix "TS" of the mtDNA sequence isolates indicates the Tswana heritage of the samples; haplogroup classification was performed by using two haplogroup classification schemes, a = Wallace classification system (2004) as discussed in Section 5.12, c = PhyloTree classification system (Van Oven and Kayser, 2009) as discussed in Section 5.12.

APPENDIX B

Global African mitochondrial genome dataset used in this study

This appendix contains information about the Global African mitochondrial genome dataset used in the analyses in this study (See Section 5.11.1). It consists of mitochondrial genome sequences generated from a Tswana cohort of 50 individuals residing in the North Western Province of South Africa and was investigated for the purposes of this study. Also included are 442 mitochondrial genome sequences that were retrieved from GenBank[®] and that were published in phylogenetic studies between 2004 and 2010 relating to African populations, as well as mitochondrial genomes that were generated in previous PhD studies at the CGR (Koekemoer, 2010; Isabirye, 2010) and that consisted of 42 mtDNA sequences from Khoi-San individuals and 39 mtDNA sequences from individuals of Ugandan origin. The Global African dataset contained 573 mitochondrial genomes in total. All of the mitochondrial genomes were selected to belong to the macrohaplogroup L, which is the macrohaplogroup that is specific for the African continent. Also included are the rCRS (Andrews *et al.*, 1999) and a mitochondrial sequence representing the chimpanzee (*Pan troglodytes*), which were used as an outgroup for all the analyses.

Haplogroup and sub-haplogroup assignments of the mitochondrial genomes are also indicated in Table B.1. The haplogroup assignments of the GenBank[®] mitochondrial genomes as published by Pereira *et al.* (2009) were used in conjunction with the haplogroup assignments determined by using two haplogroup classification schemes. These classification schemes consisted of the Wallace classification system (2004) and the PhyloTree classification system (Van Oven and Kayser, 2009), as described in Section 5.12. Reasons for inconsistencies in haplogroup assignments for the two classification systems are discussed in depth in Section 6.7.1. The mitochondrial sequence haplogroups generated in this investigation and the mitochondrial sequence haplogroups generated by other PhD studies at the CGR (Koekemoer, 2010; Isabirye, 2010) have not been published yet, as in the case of the mitochondrial sequences retrieved from GenBank[®] (Pereira *et al.*, 2009).

Table B.1 List of mitochondrial genome sequences of the Global African dataset used in this investigation

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
---	---	TS_01_2074	Tswana/ Southern Africa	---	L0c2	L0a2a2a	16,558	Current investigation
---	---	TS_02_2075	Tswana/ Southern Africa	---	L0b	L0d1b1	16,566	Current investigation
---	---	TS_03_2077	Tswana/ Southern Africa	---	L2a	L2a1	16,569	Current investigation
---	---	TS_04_2082	Tswana/ Southern Africa	---	L0a	L0d3	16,569	Current investigation
---	---	TS_05_2091	Tswana/ Southern Africa	---	L0b	L0d2a1	16,566	Current investigation
---	---	TS_06_2093	Tswana/ Southern Africa	---	L1b1	L1c2a	16,566	Current investigation
---	---	TS_07_2095	Tswana/ Southern Africa	---	L0b	L0d2a1	16,566	Current investigation
---	---	TS_08_2097	Tswana/ Southern Africa	---	L0b	L0d1b	16,567	Current investigation
---	---	TS_09_4063	Tswana/ Southern Africa	---	L0c1	L0a1b	16,567	Current investigation
---	---	TS_10_2103	Tswana/ Southern Africa	---	L2a	L2a1	16,569	Current investigation
---	---	TS_11_3002	Tswana/ Southern Africa	---	L0b	L0d2	16,566	Current investigation
---	---	TS_12_3027	Tswana/ Southern Africa	---	L0b	L0d1b	16,568	Current investigation
---	---	TS_13_3066	Tswana/ Southern Africa	---	L0a	L0d3	16,569	Current investigation
---	---	TS_14_3075	Tswana/ Southern Africa	---	L0c2	L0a2a2a	16,558	Current investigation
---	---	TS_15_3085	Tswana/ Southern Africa	---	L3b	L3d1a1a	16,567	Current investigation
---	---	TS_16_3107	Tswana/ Southern Africa	---	L2a	L2a1	16,567	Current investigation
---	---	TS_17_3117	Tswana/ Southern Africa	---	L0b	L0d2a1	16,566	Current investigation
---	---	TS_18_3236	Tswana/ Southern Africa	---	L0b	L0d2a1	16,566	Current investigation
---	---	TS_19_3459	Tswana/ Southern Africa	---	L0b	L0d2a1	16,568	Current investigation
---	---	TS_20_3466	Tswana/ Southern Africa	---	L2a	L2a1	16,567	Current investigation
---	---	TS_21_3471	Tswana/ Southern Africa	---	L0c1	L0a1b	16,567	Current investigation
---	---	TS_22_3486	Tswana/ Southern Africa	---	L0a	L0d3	16,569	Current investigation
---	---	TS_23_3015	Tswana/ Southern Africa	---	L1b1	L1c2a	16,566	Current investigation

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
---	---	TS_24_3505	Tswana/ Southern Africa	---	L0b	L0d1a	16,568	Current investigation
---	---	TS_25_4111	Tswana/ Southern Africa	---	L0b	L0d2a1	16,568	Current investigation
---	---	TS_26_4013	Tswana/ Southern Africa	---	L2a	L2a1	16,567	Current investigation
---	---	TS_27_4027	Tswana/ Southern Africa	---	L0b	L0d1b	16,568	Current investigation
---	---	TS_28_4034	Tswana/ Southern Africa	---	L0a	L0k	16,567	Current investigation
---	---	TS_29_4037	Tswana/ Southern Africa	---	L0b	L0d1c	16,568	Current investigation
---	---	TS_30_3495	Tswana/ Southern Africa	---	L3a3	L3e1	16,568	Current investigation
---	---	TS_31_4051	Tswana/ Southern Africa	---	L0b	L0d2a1	16,568	Current investigation
---	---	TS_32_4056	Tswana/ Southern Africa	---	L0b	L0d1a1	16,568	Current investigation
---	---	TS_33_3461	Tswana/ Southern Africa	---	L0c2	L0a2a2a	16,569	Current investigation
---	---	TS_34_4075	Tswana/ Southern Africa	---	L0b	L0d1a	16,566	Current investigation
---	---	TS_35_4080	Tswana/ Southern Africa	---	L0a	L0d3	16,568	Current investigation
---	---	TS_36_4083	Tswana/ Southern Africa	---	L0b	L0d1b	16,569	Current investigation
---	---	TS_37_4089	Tswana/ Southern Africa	---	L0b	L0d2a1	16,558	Current investigation
---	---	TS_38_3506	Tswana/ Southern Africa	---	L0c2	L0a2a2a	16,567	Current investigation
---	---	TS_39_4106	Tswana/ Southern Africa	---	L2a	L2a1	16,567	Current investigation
---	---	TS_40_4117	Tswana/ Southern Africa	---	L0b	L0d1	16,566	Current investigation
---	---	TS_41_5044	Tswana/ Southern Africa	---	L0b	L0d1a1	16,566	Current investigation
---	---	TS_42_5060	Tswana/ Southern Africa	---	L2a	L2a1	16,568	Current investigation
---	---	TS_43_5062	Tswana/ Southern Africa	---	L2a	L2a1	16,567	Current investigation
---	---	TS_44_5063	Tswana/ Southern Africa	---	L0c\$	L0a'b'	16,567	Current investigation
---	---	TS_45_5066	Tswana/ Southern Africa	---	L2a	L2a1	16,569	Current investigation
---	---	TS_46_4032	Tswana/ Southern Africa	---	L0c1	L0a1b	16,566	Current investigation
---	---	TS_47_5083	Tswana/ Southern Africa	---	L0b	L0d2a1	16,568	Current investigation

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
---	---	TS_48_5085	Tswana/ Southern Africa	---	L0b	L0d1b	16,568	Current investigation
---	---	TS_49_5086	Tswana/ Southern Africa	---	L2a	L2a1f	16,567	Current investigation
---	---	TS_50_5091	Tswana/ Southern Africa	---	L0a	L0d3	16,568	Current investigation
AF346986	113200490	rCRS	European	H	---	---	16,569	Andrews <i>et al.</i> , 1999
NC_001643	5835121	Pan trog	<i>Pan troglodytes</i>	---	---	---	16,554	Horai <i>et al.</i> , 1995
AF346967	13272612	bam17b	Bamileke/Africa	L3e3b	L3a2	L3e	16,567	Ingman <i>et al.</i> , 2000
AF346968	13272626	biak757	Biaka/Africa	L1c1a1a	L1b2	L1c1	16,567	Ingman <i>et al.</i> , 2000
AF346969	13272640	biak776	Biaka/Africa	L1c1a2b	L1b2	L1c1	16,567	Ingman <i>et al.</i> , 2000
AF346976	13272738	eff 004	Effik/Africa	L2a1i	L2a	L2a	16,570	Ingman <i>et al.</i> , 2000
AF346977	13272752	eff007	Effik/Africa	L2a1a	L2a	L2a1a	16,569	Ingman <i>et al.</i> , 2000
AF346980	13272794	ewon w77	Ewondo/Africa	L3e1f	L3a3	L3e2a	16,570	Ingman <i>et al.</i> , 2000
AF346985	13272864	haus 004	Hausa/Africa	L0a1a	L0c1	L0a1a	16,567	Ingman <i>et al.</i> , 2000
AF346986	13272878	ibo 006	Ibo/Africa	L1b1a3	L1a2	L1b1a	16,567	Ingman <i>et al.</i> , 2000
AF346987	13272892	ibo 12	Ibo/Africa	L1c1d	L1b2	L1c1d	16,566	Ingman <i>et al.</i> , 2000
AF346992	13272962	kiku dbs	Kikuyu/Africa	L1c2a1	L1b1	L1c2a	16,571	Ingman <i>et al.</i> , 2000
AF346994	13272990	Liso f30	Lisongo/Africa	L3e2b	L3a1	L3e	16,569	Ingman <i>et al.</i> , 2000
AF346995	13273004	mand 318	Mandenka/ Africa	L2c	L2c	L2c	16,568	Ingman <i>et al.</i> , 2000
AF346996	13273018	mbe 225	Mbenzele/ Africa	L1c1a2b	L1b2	L1c1	16,566	Ingman <i>et al.</i> , 2000
AF346997	13273032	mbe 240	Mbenzele/ Africa	L1c1a1a1	L1b2	L1c1	16,567	Ingman <i>et al.</i> , 2000
AF346998	13273046	mbu 1057	Mbuti/Africa	L0a2b	L0c2	L0a2b	16,561	Ingman <i>et al.</i> , 2000
AF346999	13273060	mbu 1058	Mbuti/Africa	L0a2b	L0c2	L0a2b	16,562	Ingman <i>et al.</i> , 2000
AF347000	13273074	mkam oao	Mkamba/Africa	L3h1a2a	L3b\$	L3h1	16,569	Ingman <i>et al.</i> , 2000
AF347008	13273186	san 1	San/Africa	L0k1	L0a	L0k1	16,569	Ingman <i>et al.</i> , 2000
AF347009	13273200	san 2	San/Africa	L0k1	L0a	L0k1	16,567	Ingman <i>et al.</i> , 2000
AF347014	13273270	yoru 002	Yoruba/Africa	L3d1a	L3b	L3d	16,567	Ingman <i>et al.</i> , 2000
AF347015	13273284	yoru 013	Yoruba/Africa	L3e2b1	L3a1	L3e	16,571	Ingman <i>et al.</i> , 2000
AF381981	17985375	441	Mauritania	L2c	L2c	L2c	16,568	Maca-Meyer <i>et al.</i> , 2001

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
AF381988	17985473	271	Morocco	L0a1b1	L0c1	L0a1	16,567	Maca-Meyer <i>et al.</i> , 2001
AF381991	17985515	430	Mauritania	L3b1a	L3c	L3cd	16,567	Maca-Meyer <i>et al.</i> , 2001
AF381992	29294531	432	Mauritania	L1c3a	L0,L1	L1c	16,566	Maca-Meyer <i>et al.</i> , 2001
AF381994	29294532	451	Mauritania	L1b1a5	L1a1	L1b1a5	16,567	Maca-Meyer <i>et al.</i> , 2001
AF381998	17985613	800	Jordan	L3d3	L3b	L3d	16,567	Maca-Meyer <i>et al.</i> , 2001
AY195766	29690686	A11L2b	Africa	L2b1	L2b	L2b1a3	16,567	Mishmar <i>et al.</i> , 2003
AY195776	48596191	A9L2a	Africa	L2a1d	L2a	L2a1f	16,569	Mishmar <i>et al.</i> , 2003
AY195777	29690840	A10L1A2	Africa	L0d2a	L0b	L0d2a	16,557	Mishmar <i>et al.</i> , 2003
AY195780	29690882	A2L1	Africa	L0a1a	L0c1	L0a1a2	16,567	Mishmar <i>et al.</i> , 2003
AY195783	48596203	A4L1B2	Africa	L1b1a4	L1a2	L	16,567	Mishmar <i>et al.</i> , 2003
AY195785	48596208	A6L2C	Africa	L2c	L2c	L2c	16,567	Mishmar <i>et al.</i> , 2003
AY195788	48596215	A5L2A1	Africa	L2a2b	L2a	L2a2	16,570	Mishmar <i>et al.</i> , 2003
AY195789	48596217	A3L1B1	Africa	L1c1a1a	L1b2	L1c1	16,567	Mishmar <i>et al.</i> , 2003
AY963585	75905883	Tor65	Uganda	L0f	L0a	L0f	16,569	Macaulay <i>et al.</i> , 2005
D38112 ^b	644480	SB17	Uganda	L0	L0c2	L0a2d	16,559	Horai <i>et al.</i> , 1995
DQ112686	70955706	AD1	Dominican Republic	L0a2a1	L0c2	L0a2a1	15,574	Kivisild <i>et al.</i> , 2006
DQ112687	70955708	AD2	Dominican Republic	L0a2a1	L0c2	L0a2a1	15,576	Kivisild <i>et al.</i> , 2006
DQ112688	70955710	AD3	Dominican Republic	L0a2a1	L0c2	L0a2a1	15,574	Kivisild <i>et al.</i> , 2006
DQ112689	70955712	AD4	Dominican Republic	L0a2a2	L0c2	L0a2a2	15,574	Kivisild <i>et al.</i> , 2006
DQ112690	70955714	AD5	Dominican Republic	L1b1a3	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112691	70955716	AD6	Dominican Republic	L1b1a3	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112692	70955718	AD7	Dominican Republic	L1b1a	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112693	70955720	AD8	Dominican Republic	L1b1a	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112694	70955722	AD9	Dominican Republic	L1c2b1	L1b1	L1c2b	15,584	Kivisild <i>et al.</i> , 2006
DQ112695	70955724	AD10	Dominican Republic	L1c1b	L1b2	L1c1b	15,574	Kivisild <i>et al.</i> , 2006
DQ112696	70955726	AD11	Dominican Republic	L1c3a	L0,L1	L1c	15,582	Kivisild <i>et al.</i> , 2006

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ112697	70955728	AD12	Dominican Republic	L1c3b1	L0,L1	L1c	15,582	Kivisild <i>et al.</i> , 2006
DQ112698	70955730	AD13	Dominican Republic	L2a1d	L2a	L2a1	15,585	Kivisild <i>et al.</i> , 2006
DQ112699	70955732	AD14	Dominican Republic	L2a1d	L2a	L2a1	15,585	Kivisild <i>et al.</i> , 2006
DQ112700	70955734	AD15	Dominican Republic	L2a1b2	L2a	L2a1c	15,585	Kivisild <i>et al.</i> , 2006
DQ112701	70955736	AD16	Dominican Republic	L2a1	L2a	L2a1	15,585	Kivisild <i>et al.</i> , 2006
DQ112702	70955738	AD17	Dominican Republic	L2b1	L2b	L2b1a2	15,583	Kivisild <i>et al.</i> , 2006
DQ112703	70955740	AD18	Dominican Republic	L2b1	L2b	L2b1	15,583	Kivisild <i>et al.</i> , 2006
DQ112704	70955742	AD19	Dominican Republic	L2b2	L2b	L2b2	15,585	Kivisild <i>et al.</i> , 2006
DQ112705	70955744	AD20	Dominican Republic	L2b2	L2b	L2b2	15,585	Kivisild <i>et al.</i> , 2006
DQ112706	70955746	AD21	Dominican Republic	L2c	L2c	L2c	15,583	Kivisild <i>et al.</i> , 2006
DQ112707	70955748	AD22	Dominican Republic	L2c1	L2c	L2c	15,583	Kivisild <i>et al.</i> , 2006
DQ112708	70955750	AD23	Dominican Republic	L2d1	L2d\$	L2d1a	15,585	Kivisild <i>et al.</i> , 2006
DQ112709	70955752	AD24	Dominican Republic	L2e	L2d	L2e	15,591	Kivisild <i>et al.</i> , 2006
DQ112710	70955754	AD25	Dominican Republic	L3b2	L3c	L3b2	15,582	Kivisild <i>et al.</i> , 2006
DQ112711	70955756	AD26	Dominican Republic	L3b1a	L3c	L3b	15,582	Kivisild <i>et al.</i> , 2006
DQ112712	70955758	AD27	Dominican Republic	L3b1a	L3c	L3b	15,582	Kivisild <i>et al.</i> , 2006
DQ112713	70955760	AD28	Dominican Republic	L3d2	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112714	70955762	AD29	Dominican Republic	L3d1d	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112715	70955764	AD30	Dominican Republic	L3d1b	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112716	70955766	AD31	Dominican Republic	L3d3	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112717	70955768	AD32	Dominican Republic	L3f1b4	L3b\$	L3f1b	15,582	Kivisild <i>et al.</i> , 2006
DQ112718	70955770	AD33	Dominican Republic	L3h1b1	L3b\$	L3h1	15,583	Kivisild <i>et al.</i> , 2006
DQ112719	70955772	AD34	Dominican Republic	L3e1b	L3a3	L3e	15,585	Kivisild <i>et al.</i> , 2006
DQ112720	70955774	AD35	Dominican Republic	L3e2b2	L3a1	L3e	15,585	Kivisild <i>et al.</i> , 2006
DQ112721	70955776	AD36	Dominican Republic	L3e2b	L3a1	L3e	15,585	Kivisild <i>et al.</i> , 2006

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ112722	70955778	AD37	Dominican Republic	L3e4	L3a3\$	L3e	15,583	Kivisild <i>et al.</i> , 2006
DQ112723	70955780	AF83	Mossi/ Burkina Faso	L2a1b	L2a	L2a1c	15,583	Kivisild <i>et al.</i> , 2006
DQ112724	70955782	AF84	Mossi/ Burkina Faso	L2a1d	L2a	L2a1f	15,585	Kivisild <i>et al.</i> , 2006
DQ112725	70955784	AF82	Mossi/ Burkina Faso	L2a1b	L2a	L2a1c	15,583	Kivisild <i>et al.</i> , 2006
DQ112726	70955786	AF65	Rimaibe/ Burkina Faso	L3e2a	L3a1	L3e2a	15,585	Kivisild <i>et al.</i> , 2006
DQ112727	70955788	AF91	Rimaibe/ Burkina Faso	L1b1a	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112728	70955790	AF66	Rimaibe/ Burkina Faso	L3e2a	L3a1	L3e2a	15,585	Kivisild <i>et al.</i> , 2006
DQ112729	70955792	AF63	Rimaibe/ Burkina Faso	L3e2a	L3a1	L3e2a	15,585	Kivisild <i>et al.</i> , 2006
DQ112730	70955794	AF79	Rimaibe/ Burkina Faso	L2a1b2	L2a	L2a1c	15,585	Kivisild <i>et al.</i> , 2006
DQ112731	70955796	AF80	Rimaibe/ Burkina Faso	L2a1d	L2a	L2a1f	15,585	Kivisild <i>et al.</i> , 2006
DQ112732	70955798	AF92	Rimaibe/ Burkina Faso	L0a1a	L0c1	L0a1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112733	70955800	AF90	Burkina Faso	L1b1a	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112734	70955802	AF67	Rimaibe/ Burkina Faso	L3e2b1	L3a1	L3e	15,585	Kivisild <i>et al.</i> , 2006
DQ112735	70955804	AF81	Rimaibe/ Burkina Faso	L2c	L2c	L2c	15,583	Kivisild <i>et al.</i> , 2006
DQ112736	70955806	AF86	Rimaibe/ Burkina Faso	L3f1b	L3b\$	L3f1b	15,582	Kivisild <i>et al.</i> , 2006
DQ112737	70955808	AF87	Foulbe/ Burkina Faso	L1b	L1a2	L1b1	15,583	Kivisild <i>et al.</i> , 2006
DQ112738	70955810	AF68	Foulbe/ Burkina Faso	L3b1b	L3c	L3b1a	15,582	Kivisild <i>et al.</i> , 2006
DQ112739	70955812	AF69	Foulbe/ Burkina Faso	L3d1b	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112740	70955814	AF64	Foulbe/ Burkina Faso	L3e2a	L3a1	L3e2a	15,585	Kivisild <i>et al.</i> , 2006
DQ112741	70955816	AF88	Foulbe/ Burkina Faso	L1b1b	L1a2	L1b1	15,583	Kivisild <i>et al.</i> , 2006
DQ112742	70955818	AF70	Foulbe/ Burkina Faso	L3b1a	L3c	L3b	15,582	Kivisild <i>et al.</i> , 2006
DQ112743	70955820	AF71	Foulbe/ Burkina Faso	L3b1a	L3c	L3b	15,582	Kivisild <i>et al.</i> , 2006
DQ112744	70955822	AF72	Foulbe/ Burkina Faso	L3d1fa	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112745	70955824	AF73	Foulbe/ Burkina Faso	L3b1b	L3c	L3b1a	15,582	Kivisild <i>et al.</i> , 2006
DQ112746	70955826	AF74	Mossi/ Burkina Faso	L3b2	L3c	L3b1a	15,584	Kivisild <i>et al.</i> , 2006

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ112747	70955828	AF75	Mossi/ Burkina Faso	L3e3b	L3a2	L3e	15,585	Kivisild <i>et al.</i> , 2006
DQ112748	70955830	AF76	Mossi/ Burkina Faso	L3b1a	L3c	L3b	15,582	Kivisild <i>et al.</i> , 2006
DQ112756	70955846	AF77	Mossi/ Burkina Faso	L3d2	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112757	70955848	AF78	Mossi/ Burkina Faso	L3e5	L3a3\$	L3e	15,583	Kivisild <i>et al.</i> , 2006
DQ112758	70955850	AF85	Mossi/ Burkina Faso	L2a1b2	L2a	L2a1c	15,582	Kivisild <i>et al.</i> , 2006
DQ112759	70955852	AF89	Foulbe/ Burkina Faso	L1b1b	L1a2	L1b1	15,583	Kivisild <i>et al.</i> , 2006
DQ112777	70955888	AF16	Nuba/Sudan	L0a1b2	L0c1	L0a1b	15,583	Kivisild <i>et al.</i> , 2006
DQ112778	70955890	AF14	Nuba/Sudan	L2a2a	L2a	L2a2a	15,585	Kivisild <i>et al.</i> , 2006
DQ112782	70955898	AF10	Berta/Ethiopia	L2a1	L2a	L2a1	15,585	Kivisild <i>et al.</i> , 2006
DQ112792	70955918	AF41	Eritrea	Pre-HV1	L3b\$	---	15,589	Kivisild <i>et al.</i> , 2006
DQ112794	70955922	AF06	Lissongo/ Africa	L1c4	L1b2\$	L1c4a	15,589	Kivisild <i>et al.</i> , 2006
DQ112796	70955926	AF07	Lissongo/ Africa	L4b2b	L3b\$	L4b	15,585	Kivisild <i>et al.</i> , 2006
DQ112829	70955992	AF53	Ghana	L1b1a	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112830	70955994	AF54	Zulu/Africa	L0d2c	L0b	L0d2c	15,582	Kivisild <i>et al.</i> , 2006
DQ112844	70956022	AF17	NaSan/Africa	L0d1b	L0b	L0d1	15,584	Kivisild <i>et al.</i> , 2006
DQ112845	70956024	AF18	Khoi-San/Africa	L4b2a2	L3b\$	L4b2	15,585	Kivisild <i>et al.</i> , 2006
DQ112847	70956028	AF19	Herero/Africa	L3d3a	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112848	70956030	AF20	Sotho/Africa	L0a2a2	L0c2	L0a2a2	15,574	Kivisild <i>et al.</i> , 2006
DQ112849	70956032	AF21	Pedi/Africa	L2a1f	L2a	L2a1b1	15,585	Kivisild <i>et al.</i> , 2006
DQ112850	70956034	AF22	Tswana/Africa	L0d2a	L0b	L0d2a	15,584	Kivisild <i>et al.</i> , 2006
DQ112851	70956036	AF23	Ambo/Africa	L3d3a	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112852	70956038	AF24	San/Namibia	L0d1b	L0b	L0d1	15,584	Kivisild <i>et al.</i> , 2006
DQ112853	70956040	AF26	Herero/Africa	L3d3a	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112854	70956042	AF25	Zulu/Africa	L0d1a	L0b	L0d1a1	15,584	Kivisild <i>et al.</i> , 2006
DQ112855	70956044	AF27	Tswana/Africa	L0d1b	L0b	L0d1	15,583	Kivisild <i>et al.</i> , 2006
DQ112856	70956046	AF55	San/Namibia	L0d1c1	L0b	L0d1	15,582	Kivisild <i>et al.</i> , 2006

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ112857	70956048	AF28	Herero/Africa	L3d3a	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112883	70956100	AF29	Mandenka/ Africa	L2c1	L2c	L2c	15,583	Kivisild <i>et al.</i> , 2006
DQ112884	70956102	AF30	Mandenka/ Africa	L3d	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112899	70956132	AF09	Khoi-San/Africa	L0d1c1	L0b	L0d1	15,582	Kivisild <i>et al.</i> , 2006
DQ112900	70956134	AF08	Khoi-San/Africa	L2a1f	L2a	L2a1b1	15,585	Kivisild <i>et al.</i> , 2006
DQ112901	70956136	AF102	Pygmy/Zaire	L0a2b	L0c2	L0a2b1	15,576	Kivisild <i>et al.</i> , 2006
DQ112902	70956138	AF02	Biaka Pygmy/Africa	L1c4	L1b2\$	L1c4b	15,587	Kivisild <i>et al.</i> , 2006
DQ112903	70956140	AF31	Pygmy/Zaire	L2a2a	L2a	L2a2	15,585	Kivisild <i>et al.</i> , 2006
DQ112904	70956142	AF05	Pygmy/Zaire	L0a2b	L0c2	L0a2b	15,574	Kivisild <i>et al.</i> , 2006
DQ112905	70956144	AF32	Pygmy/Zaire	L2a2b	L2a	L2a2	15,585	Kivisild <i>et al.</i> , 2006
DQ112906	70956146	AF33	Pygmy/Zaire	L0a2b	L0c2	L0a2b	15,576	Kivisild <i>et al.</i> , 2006
DQ112907	70956148	AF34	Pygmy/CAR	L1c1a2b	L1b2	L1c1	15,582	Kivisild <i>et al.</i> , 2006
DQ112908	70956150	AF35	Pygmy/CAR	L1c1a2b	L1b2	L1c1	15,582	Kivisild <i>et al.</i> , 2006
DQ112909	70956152	AF04	Pygmy/Zaire	L2a2	L2a	L2a2	15,585	Kivisild <i>et al.</i> , 2006
DQ112910	70956154	AF93	Pygmy/CAR	L1c1a2b	L1b2	L1c1	15,582	Kivisild <i>et al.</i> , 2006
DQ112911	70956156	AF52	Pygmy/Zaire	L2a2b	L2a	L2a2	15,585	Kivisild <i>et al.</i> , 2006
DQ112912	70956158	AF94	Pygmy/CAR	L1c1a1a	L1b2	L1c1	15,582	Kivisild <i>et al.</i> , 2006
DQ112913	70956160	AF95	Pygmy/CAR	L1c1a1a	L1b2	L1c1	15,582	Kivisild <i>et al.</i> , 2006
DQ112914	70956162	AF01	Biaka Pygmy/Africa	L1c4	L1b2\$	L1c4b	15,587	Kivisild <i>et al.</i> , 2006
DQ112915	70956164	AF97	Pygmy/Zaire	L0a2b	L0c2	L0a2b1	15,576	Kivisild <i>et al.</i> , 2006
DQ112916	70956166	AF36	Pygmy/Zaire	L2a2b	L2a	L2a2	15,585	Kivisild <i>et al.</i> , 2006
DQ112917	70956168	AF37	Pygmy/Zaire	L0a2b	L0c2	L0a2b	15,576	Kivisild <i>et al.</i> , 2006
DQ112918	70956170	AF98	Pygmy/Zaire	L0a2b	L0c2	L0a2b	15,576	Kivisild <i>et al.</i> , 2006
DQ112919	70956172	AF38	Pygmy/CAR	L1c1a1a	L1b2	L1c1	15,582	Kivisild <i>et al.</i> , 2006
DQ112920	70956174	AF39	Pygmy/CAR	L1c1a1a	L1b2	L1c1	15,582	Kivisild <i>et al.</i> , 2006
DQ112921	70956176	AF99	Pygmy/Zaire	L5a1c	L0\$a	L5a1	15,586	Kivisild <i>et al.</i> , 2006
DQ112922	70956178	AF100	Pygmy/Zaire	L5a1c	L0\$a	L5a1	15,586	Kivisild <i>et al.</i> , 2006

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ112923	70956180	AF40	Pygmy/CAR	L0a2a1	L0c2	L0a2a1	15,574	Kivisild <i>et al.</i> , 2006
DQ112924	70956182	AF101	Pygmy/Zaire	L2a2b	L2a	L2a2	15,585	Kivisild <i>et al.</i> , 2006
DQ112925	70956184	AF96	Pygmy/Zaire	L1c1a2a	L1b2	L1c1	15,582	Kivisild <i>et al.</i> , 2006
DQ112932	70956198	AF42	Ethiopia	U1a	L3b\$	---	15,584	Kivisild <i>et al.</i> , 2006
DQ112934	70956202	AF44	Ethiopia	L0f2a	L0a	L0f	15,585	Kivisild <i>et al.</i> , 2006
DQ112949	70956232	AF50	Sudan	L3d1'2'3'	L3b	L3d	15,585	Kivisild <i>et al.</i> , 2006
DQ112956	70956246	AF45	Sudan	L3j	L3b\$	L3cd	15,583	Kivisild <i>et al.</i> , 2006
DQ112957	70956248	AF46	Sudan	L3h1a1	L3b\$	L3h1	15,585	Kivisild <i>et al.</i> , 2006
DQ112958	70956250	AF47	Sudan	L3i1a	L3a3\$	L3e'l'k'	15,585	Kivisild <i>et al.</i> , 2006
DQ112959	70956252	AF48	Sudan	L0a1a	L0c2\$	L0a1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112960	70956254	AF49	Sudan	L3i1a	L3a3\$	L3e'l'k'	15,585	Kivisild <i>et al.</i> , 2006
DQ112961	70956256	AF51	Sudan	L3h1a1	L3b\$	L3h1	15,585	Kivisild <i>et al.</i> , 2006
DQ112962	70956258	AF13	Tuareg/Africa	H1	L3b\$	---	15,585	Kivisild <i>et al.</i> , 2006
DQ282505	82494118	L1b-3-01	Hispanic	L1b	L1a2	L1b1a7	16,567	Just <i>et al.</i> , 2008
DQ282506	82494132	L1b-3-02	Hispanic	L1b	L1a2	L1b1a7	16,567	Just <i>et al.</i> , 2008
DQ282507	82494146	L3e-5-01	Hispanic	L3e	L3a3	L3e	16,563	Just <i>et al.</i> , 2008
DQ304897	83265615	L0a-1-01	African American	L0a	L0c1	L0a1b	16,567	Just <i>et al.</i> , 2008
DQ304898	83265629	L0a-1-02	African American	L0a	L0c1	L0a1b	16,567	Just <i>et al.</i> , 2008
DQ304899	83265643	L0a-1-03	African American	L0a	L0c1	L0a1b1a	16,567	Just <i>et al.</i> , 2008
DQ304900	83265657	L0a-1-04	African American	L0a	L0c1	L0a1b1	16,567	Just <i>et al.</i> , 2008
DQ304901	83265671	L0a-2-01	African American	L0a	L0c1	L0a1a2	16,568	Just <i>et al.</i> , 2008
DQ304902	83265685	L0a-2-02	African American	L0a	L0c1	L0a1a2	16,567	Just <i>et al.</i> , 2008
DQ304903	83265699	L0a-2-03	African American	L0a	L0c1	L0a1a2	16,567	Just <i>et al.</i> , 2008
DQ304904	83265713	L0a-2-04	African American	L0a	L0c1	L0a1a2	16,567	Just <i>et al.</i> , 2008
DQ304905	83265727	L1b-1-01	African American	L1b	L1a2	L1b1a	16,569	Just <i>et al.</i> , 2008
DQ304906	83265741	L1b-1-02	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304907	83265755	L1b-1-03	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ304908	83265769	L1b-1-04	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304909	83265783	L1b-1-05	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304910	83265797	L1b-1-06	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304911	83265811	L1b-1-07	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304912	83265825	L1b-1-08	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304913	83265839	L1b-1-09	African American	L1b	L1a2	L1b1a	16,569	Just <i>et al.</i> , 2008
DQ304914	83265853	L1b-1-10	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304915	83265867	L1b-1-11	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304916	83265881	L1b-1-12	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304917	83265895	L1b-1-13	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304918	83265909	L1b-1-14	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304919	83265923	L1b-2-01	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304920	83265937	L1b-2-02	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304921	83265951	L1b-2-03	African American	L1b	L1a2	L1b1a7	16,572	Just <i>et al.</i> , 2008
DQ304922	83265965	L1b-2-04	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304923	83265979	L1b-2-05	African American	L1b	L1a2	L1b1a7	16,567	Just <i>et al.</i> , 2008
DQ304924	83265993	L2a-1-01	African American	L2a	L2a	L2a1a	16,570	Just <i>et al.</i> , 2008
DQ304925	83266007	L2a-1-02	African American	L2a	L2a	L2a1a	16,574	Just <i>et al.</i> , 2008
DQ304926	83266021	L2a-1-03	African American	L2a	L2a	L2a1a	16,571	Just <i>et al.</i> , 2008
DQ304927	83266035	L2a-1-04	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304928	83266049	L2a-1-05	African American	L2a	L2a	L2a1a	16,568	Just <i>et al.</i> , 2008
DQ304929	83266063	L2a-1-06	African American	L2a	L2a	L2a1	16,567	Just <i>et al.</i> , 2008
DQ304930	83266077	L2a-1-07	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304931	83266091	L2a-1-08	African American	L2a	L2a	L2a1	16,567	Just <i>et al.</i> , 2008
DQ304932	83266105	L2a-1-09	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ304933	83266119	L2a-1-10	African American	L2a	L2a	L2a1a	16,571	Just <i>et al.</i> , 2008
DQ304934	83266133	L2a-2-01	African American	L2a	L2a	L2a1	16,573	Just <i>et al.</i> , 2008
DQ304935	83266147	L2a-2-02	African American	L2a	L2a	L2a1f	16,571	Just <i>et al.</i> , 2008
DQ304936	83266161	L2a-2-03	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304937	83266175	L2a-2-04	African American	L2a	L2a	L2a1	16,572	Just <i>et al.</i> , 2008
DQ304938	83266189	L2a-3-01	African American	L2a	L2a	L2a1	16,560	Just <i>et al.</i> , 2008
DQ304939	83266203	L2a-3-02	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304940	83266217	L2a-3-03	African American	L2a	L2a	L2a1	16,559	Just <i>et al.</i> , 2008
DQ304941	83266231	L2a-3-04	African American	L2a	L2a	L2a1	16,569	Just <i>et al.</i> , 2008
DQ304942	83266245	L2a-4-01	African American	L2a	L2a	L2a1c	16,568	Just <i>et al.</i> , 2008
DQ304943	83266259	L2a-4-02	African American	L2a	L2a	L2a1c	16,568	Just <i>et al.</i> , 2008
DQ304944	83266273	L2a-4-03	African American	L2a	L2a	L2a1c	16,569	Just <i>et al.</i> , 2008
DQ304945	83266287	L2a-4-04	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304946	83266301	L2a-4-05	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304947	83266315	L2a-4-06	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304948	83266329	L2a-4-07	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304949	83266343	L2a-4-09	African American	L2a	L2a	L2a1c	16,568	Just <i>et al.</i> , 2008
DQ304950	83266357	L2a-4-10	African American	L2a	L2a	L2a1c	16,567	Just <i>et al.</i> , 2008
DQ304951	83266371	L2a-4-11	African American	L2a	L2a	L2a1c	16,568	Just <i>et al.</i> , 2008
DQ304952	83266385	L2a-5-01	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304953	83266399	L2a-5-02	African American	L2a	L2a	L2a1f	16,571	Just <i>et al.</i> , 2008
DQ304954	83266413	L2a-5-03	African American	L2a	L2a	L2a1f	16,571	Just <i>et al.</i> , 2008
DQ304955	83266427	L2a-5-04	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304956	83266441	L2a-5-05	African American	L2a	L2a	L2a1f	16,570	Just <i>et al.</i> , 2008
DQ304957	83266455	L2a-5-06	African American	L2a	L2a	L2a1f	16,568	Just <i>et al.</i> , 2008

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ304958	83266469	L2a-5-07	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304959	83266483	L2a-5-08	African American	L2a	L2a	L2a1	16,571	Just <i>et al.</i> , 2008
DQ304960	83266497	L2a-5-09	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304961	83266511	L2a-5-10	African American	L2a	L2a	L2a1	16,571	Just <i>et al.</i> , 2008
DQ304962	83266525	L2a-5-11	African American	L2a	L2a	L2a1f	16,571	Just <i>et al.</i> , 2008
DQ304963	83266539	L2a-5-12	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304964	83266553	L2a-5-13	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304965	83266567	L2a-5-14	African American	L2a	L2a	L2a1f	16,568	Just <i>et al.</i> , 2008
DQ304966	83266581	L2a-5-15	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304967	83266595	L2a-5-16	African American	L2a	L2a	L2a1	16,571	Just <i>et al.</i> , 2008
DQ304968	83266609	L2a-6-01	African American	L2a	L2a	L2a1a	16,570	Just <i>et al.</i> , 2008
DQ304969	83266623	L2a-6-02	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304970	83266637	L2a-6-03	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304971	83266651	L2a-6-04	African American	L2a	L2a	L2a1a	16,571	Just <i>et al.</i> , 2008
DQ304972	83266665	L2a-6-05	African American	L2a	L2a	L2a1a	16,571	Just <i>et al.</i> , 2008
DQ304973	83266679	L2a-6-06	African American	L2a	L2a	L2a1a	16,570	Just <i>et al.</i> , 2008
DQ304974	83266693	L2a-6-07	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304975	83266707	L2a-6-08	African American	L2a	L2a	L2a1a	16,570	Just <i>et al.</i> , 2008
DQ304976	83266721	L2a-6-09	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304977	83266735	L2a-6-12	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304978	83266749	L2b-1-01	African American	L2b	L2b	L2b	16,568	Just <i>et al.</i> , 2008
DQ304979	83266763	L2b-1-02	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304980	83266777	L2b-1-03	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304981	83266791	L2b-1-04	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304982	83266805	L2b-1-05	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ304983	83266819	L2b-1-07	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304984	83266833	L2b-1-08	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304985	83266847	L2b-1-09	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304986	83266861	L2c-1-01	African American	L2c	L2c	L2c	16,567	Just <i>et al.</i> , 2008
DQ304987	83266875	L2c-1-02	African American	L2c	L2c	L2c	16,568	Just <i>et al.</i> , 2008
DQ304988	83266889	L2c-1-03	African American	L2c	L2c	L2c	16,568	Just <i>et al.</i> , 2008
DQ304989	83266903	L2c-1-04	African American	L2c	L2c	L2c	16,567	Just <i>et al.</i> , 2008
DQ304990	83266917	L3b-1-01	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304991	83266931	L3b-1-02	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304992	83266945	L3b-1-03	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304993	83266959	L3b-2-01	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304994	83266973	L3b-2-02	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304995	83266987	L3b-2-03	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304996	83267001	L3b-2-04	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304997	83267015	L3b-2-05	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304998	83267029	L3e-1-01	African American	L3e	L3a1	L3e	16,570	Just <i>et al.</i> , 2008
DQ304999	83267043	L3e-1-02	African American	L3e	L3a1	L3e	16,572	Just <i>et al.</i> , 2008
DQ305000	83267057	L3e-1-03	African American	L3e	L3a1	L3e	16,571	Just <i>et al.</i> , 2008
DQ305001	83267071	L3e-1-04	African American	L3e	L3a1	L3e	16,571	Just <i>et al.</i> , 2008
DQ305002	83267085	L3e-1-05	African American	L3e	L3a1	L3e	16,571	Just <i>et al.</i> , 2008
DQ305003	83267099	L3e-1-06	African American	L3e	L3a1	L3e	16,570	Just <i>et al.</i> , 2008
DQ305004	83267113	L3e-1-07	African American	L3e	L3a1	L3e	16,570	Just <i>et al.</i> , 2008
DQ305005	83267127	L3e-1-08	African American	L3e	L3a1	L3e	16,571	Just <i>et al.</i> , 2008
DQ305006	83267141	L3e-1-09	African American	L3e	L3a1	L3e	16,570	Just <i>et al.</i> , 2008
DQ305007	83267155	L3e-1-10	African American	L3e	L3a1	L3e	16,572	Just <i>et al.</i> , 2008

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ305008	83267169	L3e-1-11	African American	L3e	L3a1	L3e	16,572	Just <i>et al.</i> , 2008
DQ305009	83267183	L3e-1-12	African American	L3e	L3a1	L3e	16,571	Just <i>et al.</i> , 2008
DQ305010	83267197	L3e-2-01	African American	L3e	L3a2	L3e	16,567	Just <i>et al.</i> , 2008
DQ305011	83267211	L3e-2-02	African American	L3e	L3a2	L3e	16,567	Just <i>et al.</i> , 2008
DQ305012	83267225	L3e-2-03	African American	L3e	L3a2	L3e	16,572	Just <i>et al.</i> , 2008
DQ305013	83267239	L3e-2-04	African American	L3e	L3a2	L3e	16,568	Just <i>et al.</i> , 2008
DQ305014	83267253	L3e-2-05	African American	L3e	L3a2	L3e	16,572	Just <i>et al.</i> , 2008
DQ305015	83267267	L3e-2-06	African American	L3e	L3a2	L3e	16,567	Just <i>et al.</i> , 2008
DQ305016	83267281	L3e-2-07	African American	L3e	L3a2	L3e	16,568	Just <i>et al.</i> , 2008
DQ305017	83267295	L3e-2-08	African American	L3e	L3a2	L3e	16,567	Just <i>et al.</i> , 2008
DQ305018	83267309	L3e-3-01	African American	L3e	L3a1	L3e	16,572	Just <i>et al.</i> , 2008
DQ305019	83267323	L3e-3-02	African American	L3e	L3a1	L3e	16,571	Just <i>et al.</i> , 2008
DQ305020	83267337	L3e-3-03	African American	L3e	L3a1	L3e	16,572	Just <i>et al.</i> , 2008
DQ305021	83267351	L3e-4-01	African American	L3e	L3a1	L3e	16,570	Just <i>et al.</i> , 2008
DQ305022	83267365	L3e-4-02	African American	L3e	L3a1	L3e	16,572	Just <i>et al.</i> , 2008
DQ305023	83267379	L3e-4-03	African American	L3e	L3a1	L3e	16,568	Just <i>et al.</i> , 2008
DQ305024	83267393	L3e-6-01	African American	L3e	L3a1	L3e2a	16,570	Just <i>et al.</i> , 2008
DQ305025	83267407	L3e-6-02	African American	L3e	L3a1	L3e2a	16,570	Just <i>et al.</i> , 2008
DQ305026	83267421	L3e-6-03	African American	L3e	L3a1	L3e2a	16,570	Just <i>et al.</i> , 2008
DQ305027	83267435	L3e-6-04	African American	L3e	L3a1	L3e2a	16,570	Just <i>et al.</i> , 2008
DQ305028	83267449	L3e-6-05	African American	L3e	L3a1	L3e2a	16,569	Just <i>et al.</i> , 2008
DQ305029	83267463	L3e-6-06	African American	L3e	L3a1	L3e2a	16,569	Just <i>et al.</i> , 2008
DQ305030	83267477	L3e-6-07	African American	L3e	L3a1	L3e2a	16,569	Just <i>et al.</i> , 2008
DQ305031	83267491	L3e-6-08	African American	L3e	L3a1	L3e2a	16,569	Just <i>et al.</i> , 2008
DQ305032	83267505	L3f-1-01	African American	L3f	L3b\$	L3f1b	16,568	Just <i>et al.</i> , 2008

Table B-1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ305033	83267519	L3f-1-02	African American	L3f	L3b\$	L3f1b	16,569	Just <i>et al.</i> , 2008
DQ305034	83267533	L3f-1-03	African American	L3f	L3b\$	L3f1b	16,569	Just <i>et al.</i> , 2008
DQ305035	83267547	L3f-1-04	African American	L3f	L3b\$	L3f1b	16,569	Just <i>et al.</i> , 2008
DQ305036	83267561	L3f-1-05	African American	L3f	L3b\$	L3f1b	16,568	Just <i>et al.</i> , 2008
DQ341058	84682334	Tor29	Dominican Republic	L0a2a	L0c2	L0a2a1	16,558	Torrioni <i>et al.</i> , 2006
DQ341059	84682348	Tor7	Dominican Republic	L1c2b1	L1b1	L1c2b	16,584	Torrioni <i>et al.</i> , 2006
DQ341060	84682362	Tor74	Ethiopia	L5a1a	L0\$a	L5a1a	16,570	Torrioni <i>et al.</i> , 2006
DQ341061	84682376	Tor68	Ethiopia	L5c1	L0\$a	L5c1	16,571	Torrioni <i>et al.</i> , 2006
DQ341062	84682390	Tor38	Dominican Republic	L2d1	L2d\$	L2d1a	16,569	Torrioni <i>et al.</i> , 2006
DQ341063	85541074	Tor39	Ethiopia	L6b	L2d\$	L6b	16,572	Torrioni <i>et al.</i> , 2006
DQ341064	84682418	Tor66	Ethiopia	L4a1	L3b\$	L4a1	16,569	Torrioni <i>et al.</i> , 2006
DQ341065	84682432	Tor71	Ethiopia	L4b2a1	L3b\$	L4b2	16,567	Torrioni <i>et al.</i> , 2006
DQ341066	84682446	Tor72	Ethiopia	L3x2a	L3a3\$	L3e'l'k'	16,574	Torrioni <i>et al.</i> , 2006
DQ341067	84682460	Tor82	Ethiopia	L3x1	L3a3\$	L3e'l'k'	16,570	Torrioni <i>et al.</i> , 2006
DQ341068	84682474	Tor70	Ethiopia	L3i2	L3a3\$	L3b'f	16,566	Torrioni <i>et al.</i> , 2006
DQ341069	84682488	Tor69	Ethiopia	L3i1b	L3a3\$	L3e'l'k'	16,571	Torrioni <i>et al.</i> , 2006
DQ341070	84682502	Tor79	Nigeria	L3e5	L3a3\$	L3e	16,567	Torrioni <i>et al.</i> , 2006
DQ341071	84682516	Tor5	Dominican Republic	L3e2b	L3a1	L3e	16,570	Torrioni <i>et al.</i> , 2006
DQ341072	84682530	Tor4	Dominican Republic	L3d1b	L3b	L3d	16,567	Torrioni <i>et al.</i> , 2006
DQ341073	84682544	Tor6	Dominican Republic	L3b1a	L3c	L3b	16,567	Torrioni <i>et al.</i> , 2006
DQ341074	84682558	Tor84	Ethiopia	L3c	L3b\$	L3c	16,568	Torrioni <i>et al.</i> , 2006
DQ341075	84682572	Tor80	Nigeria	L3f3	L3b\$	L3f3	16,568	Torrioni <i>et al.</i> , 2006
DQ341076	84682586	Tor83	Ethiopia	L3f2a	L3b\$	L3f2	16,569	Torrioni <i>et al.</i> , 2006
DQ341077	84682600	Tor75	Ethiopia	L3f1b	L3b\$	L3f1b	16,569	Torrioni <i>et al.</i> , 2006
DQ341078	84682614	Tor81	Nigeria	L3f1a	L3b\$	L3f1a	16,568	Torrioni <i>et al.</i> , 2006
DQ341079	84682628	Tor31	Ethiopia	L3h1b1	L3b\$	L3h1	16,568	Torrioni <i>et al.</i> , 2006
DQ341080	84682642	Tor67	Ethiopia	L3h2	L3b	L3h2	16,567	Torrioni <i>et al.</i> , 2006

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ341081	84682656	Tor73	Ethiopia	L3a1	L3b\$	L3a	16,567	Torroni <i>et al.</i> , 2006
EF184580	133854527	TZSW053_L5	Sandawe/ Tanzania	L5	L0\$b	L5	16,559	Gonder <i>et al.</i> , 2007
EF184581	133854541	TZSW087_L5	Sandawe/ Tanzania	L5	L0\$b	L5	16,560	Gonder <i>et al.</i> , 2007
EF184582	133854555	TZMW009_L5	Mbugwe/ Tanzania	L5	L0\$a	L5c	16,570	Gonder <i>et al.</i> , 2007
EF184583	133854569	TZSW086_L5	Sandawe/ Tanzania	L5	L0\$b	L5	16,559	Gonder <i>et al.</i> , 2007
EF184584	133854583	TZSW055_L5	Sandawe/ Tanzania	L5	L0\$b	L5	16,560	Gonder <i>et al.</i> , 2007
EF184585	133854597	Tzsw109_L0d	Sandawe/ Tanzania	L0d	L0a	L0d3	16,567	Gonder <i>et al.</i> , 2007
EF184586	133854611	Tzsw084_L0d	Sandawe/ Tanzania	L0d	L0b	L0d1b	16,568	Gonder <i>et al.</i> , 2007
EF184587	133854625	Tzsw068_L0d	Sandawe/ Tanzania	L0d	L0a	L0d3	16,569	Gonder <i>et al.</i> , 2007
EF184588	133854639	Tzsw010_L0d	Sandawe/ Tanzania	L0d	L0a	L0d3	16,569	Gonder <i>et al.</i> , 2007
EF184589	133854653	Tzbg031_L0d	Burunge/ Tanzania	L0d	L2a	L0d3	16,569	Gonder <i>et al.</i> , 2007
EF184590	133854667	sanC5_L0d	San/ South Africa	L0d	L0b	L0d1	16,568	Gonder <i>et al.</i> , 2007
EF184591	133854681	San_54_L0d	San/ South Africa	L0d	L0b	L0d2c	16,568	Gonder <i>et al.</i> , 2007
EF184592	133854695	sanC6_L0d2	San/ South Africa	L0d2	L0b	L0d1c1a	16,566	Gonder <i>et al.</i> , 2007
EF184593	133854709	sanC2_L0d2	San/ South Africa	L0d2	L0b	L0d1c	16,566	Gonder <i>et al.</i> , 2007
EF184594	133854723	San107_L0d2	San/ South Africa	L0d2	L0b	L0d1c1b	16,571	Gonder <i>et al.</i> , 2007
EF184595	133854737	TZWF021_L0f	Wafiome/ Tanzania	L0f	L2a	L0f2	16,568	Gonder <i>et al.</i> , 2007
EF184596	133854751	TZAK002_L0f	Akie/ Tanzania	L0f	L2d	L0f	16,568	Gonder <i>et al.</i> , 2007
EF184597	133854765	TZTR029_L0f	Turu/ Tanzania	L0f	L0a	L0f	16,570	Gonder <i>et al.</i> , 2007
EF184598	133854779	TZBG034_L0f	Burunge/ Tanzania	L0f	L0a	L0f2	16,566	Gonder <i>et al.</i> , 2007
EF184599	133854793	TZDT068_L0f	Datog/ Tanzania	L0f	L0,1,2	L0f2	16,570	Gonder <i>et al.</i> , 2007
EF184600	133854807	TZGG017_L0f	Gogo/ Tanzania	L0f	L0\$a	L0f2	16,568	Gonder <i>et al.</i> , 2007
EF184601	133854821	TZDT067_L0a	Datog/ Tanzania	L0a	L0c1	L0a1b	16,568	Gonder <i>et al.</i> , 2007

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
EF184602	133854835	TZSW038_L0a	Sandawe/ Tanzania	L0a	L0c2	L0a2	16,559	Gonder <i>et al.</i> , 2007
EF184603	133854849	TZPR030_L0a	Pare/ Tanzania	L0a	L0c2	L0a2a1	16,559	Gonder <i>et al.</i> , 2007
EF184604	133854863	Tzsw050_L0a	Sandawe/ Tanzania	L0a	L0c2	L0a2	16,557	Gonder <i>et al.</i> , 2007
EF184605	133854877	tztr002_L0a	Turu/ Tanzania	L0a	L0c2	L0a2a2	16,559	Gonder <i>et al.</i> , 2007
EF184606	133854891	Tzsw005_L0a	Sandawe/ Tanzania	L0a	L0c2	L0a2	16,559	Gonder <i>et al.</i> , 2007
EF184607	133854905	tzsw015_L0a	Sandawe/ Tanzania	L0a	L2a	L0a2	16,558	Gonder <i>et al.</i> , 2007
EF184608	133854919	TZTR001_L0a	Turu/ Tanzania	L0a	L2a	L0a2	16,560	Gonder <i>et al.</i> , 2007
EF184610	133854946	San_11_L0k	San/ South Africa	L0k	L0a	L0k1	16,564	Gonder <i>et al.</i> , 2007
EF184611	133854959	sanC3_L0k	San/ South Africa	L0k	L0a	L0k1	16,568	Gonder <i>et al.</i> , 2007
EF184612	133854973	TZTR031_L1c	Turu/ Tanzania	L1c	L0,L1	L1c	16,567	Gonder <i>et al.</i> , 2007
EF184613	133854987	CAPL081_L1c	Bakola/ Cameroon	L1c	L1b2	L1c1	16,567	Gonder <i>et al.</i> , 2007
EF184614	133855001	CAPL079_L1c	Bakola/ Cameroon	L1c	L2d\$	L1c	16,567	Gonder <i>et al.</i> , 2007
EF184615	133855015	CAPL029_L1c	Bakola/ Cameroon	L1c	L1b2	L1c1	16,567	Gonder <i>et al.</i> , 2007
EF184616	133855029	CAPL006_L1c	Bakola/ Cameroon	L1c	L1b2	L1c1	16,567	Gonder <i>et al.</i> , 2007
EF184617	133855043	Tzbg037_L2a	Burunge/ Tanzania	L2a	L2a	L2a1c	16,570	Gonder <i>et al.</i> , 2007
EF184618	133855057	Tzhz037_L2a	Hadza/ Tanzania	L2a	L2a	L2a1	16,570	Gonder <i>et al.</i> , 2007
EF184619	133855070	Tzhz077_L2a	Hadza/ Tanzania	L2a	L2a	L2a1	16,570	Gonder <i>et al.</i> , 2007
EF184620	133855083	tztr037_L2a	Turu/ Tanzania	L2a	L2a	L2a1	16,571	Gonder <i>et al.</i> , 2007
EF184621	133855097	tzms014_L2	Maasai/ Tanzania	L2	L2d\$	L2d1a	16,569	Gonder <i>et al.</i> , 2007
EF184622	133855111	TZHZ251_L3h	Hadza/ Tanzania	L3h	L3b\$	L3h1	16,570	Gonder <i>et al.</i> , 2007
EF184623	133855125	Tzbg004_L3	Burunge/ Tanzania	L3	L3b	L3d	16,568	Gonder <i>et al.</i> , 2007
EF184624	133855139	Tzhz032_L3f	Hadza/ Tanzania	L3f	L3b\$	L3h1	16,570	Gonder <i>et al.</i> , 2007
EF184625	133855153	Tzhz061_L3f	Hadza/ Tanzania	L3f	L3b\$	L3a	16,572	Gonder <i>et al.</i> , 2007

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
EF184627	133855181	Tzsw011_L3g	Sandawe/ Tanzania	L3g	L3b\$	L3\$	16,570	Gonder <i>et al.</i> , 2007
EF184628	133855195	tztr007_L3d	Turu/ Tanzania	L3d	L3b	L3d	16,568	Gonder <i>et al.</i> , 2007
EF184629	133855209	tztr023_L3g	Turu/ Tanzania	L3g	L3b\$	L3\$	16,570	Gonder <i>et al.</i> , 2007
EF184630	133855223	Tztr024_L3	Turu/ Tanzania	L3	L3b\$	L3a	16,568	Gonder <i>et al.</i> , 2007
EF184631	133855237	TZRG044_L3	Rangi/ Tanzania	L3	L3b\$	L3h1	16,569	Gonder <i>et al.</i> , 2007
EF184632	133855251	TZIQ006_L3	Iraqw/ Tanzania	L3	L3b\$	L3h1	16,569	Gonder <i>et al.</i> , 2007
EF184633	133855265	sanC1_L3	San/ South Africa	L3	L3b\$	L3\$	16,570	Gonder <i>et al.</i> , 2007
EF184639	133855349	TZIQ053_L3	Iraqw/ Tanzania	L3	L3b\$	L3\$	16,570	Gonder <i>et al.</i> , 2007
EF184640	133855363	TZHZ081_L3	Hadza/ Tanzania	L3	L3b\$	---	16,569	Gonder <i>et al.</i> , 2007
EF184641	133855376	TZMW031_L3	Mbugwe/ Tanzania	L3	L3b	L3d	16,568	Gonder <i>et al.</i> , 2007
NC_001807 ^c	17981852	---	Yoruba/Africa	L3e2b1	L3a1	L3e	16,571	Ingman <i>et al.</i> , 2000
EF657241	151327826	MTDNA108	African	L3b	L3c	L3cd	15,445	Herrnstadt <i>et al.</i> , 2002
EF657272	151328260	MTDNA136	African	L3e	L3a1	L3e	15,446	Herrnstadt <i>et al.</i> , 2002
EF657277	151328330	MTDNA140	African	L3d	L3b	L3d	15,446	Herrnstadt <i>et al.</i> , 2002
EF657279	151328358	MTDNA142	African	L2a	L2a	L2a1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657286	151328456	MTDNA149	African	L1a	L0c2	L0a2	15,437	Herrnstadt <i>et al.</i> , 2002
EF657291	151328526	MTDNA153	African	L2	L2d	L2e	15,446	Herrnstadt <i>et al.</i> , 2002
EF657293	151328554	MTDNA155	African	L3b	L3c	L3c	15,445	Herrnstadt <i>et al.</i> , 2002
EF657294	151328568	MTDNA156	African	L2a	L2a	L2a1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657296	151328596	MTDNA158	African	L1b	L1a2	L1b1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657297	151328609	MTDNA159	African	L3e	L3a3	L3e	15,446	Herrnstadt <i>et al.</i> , 2002
EF657299	151328637	MTDNA160	African	L2b	L2d\$	L2d1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657301	151328665	MTDNA162	African	L2a	L2a	L2a1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657302	151328679	MTDNA163	African	L3e	L3a3\$	L3e	15,446	Herrnstadt <i>et al.</i> , 2002

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
EF657303	151328693	MTDNA164	African	L3b	L3c	L3b1a	15,445	Herrnstadt <i>et al.</i> , 2002
EF657304	151328707	MTDNA165	African	L2a	L2a	L2a1c	15,446	Herrnstadt <i>et al.</i> , 2002
EF657312	151328817	MTDNA172	African	L2a	L2a	L2a1	15,446	Herrnstadt <i>et al.</i> , 2002
EF657313	151328831	MTDNA173	African	L1c	L1b1	L1c2b	15,445	Herrnstadt <i>et al.</i> , 2002
EF657315	151328859	MTDNA175	African	L2b	L2b	L2b	15,446	Herrnstadt <i>et al.</i> , 2002
EF657321	151328943	MTDNA180	African	L3e	L3a2	L3e	15,446	Herrnstadt <i>et al.</i> , 2002
EF657330	151329069	MTDNA189	African	L3b	L3c	L3b1a	15,445	Herrnstadt <i>et al.</i> , 2002
EF657334	151329125	MTDNA192	African	L1b	L1a2	L1b1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657335	151329138	MTDNA193	African	L2a	L2a	L2a1	15,446	Herrnstadt <i>et al.</i> , 2002
EF657336	151329152	MTDNA194	African	L1c	L1b2	Lc1b	15,448	Herrnstadt <i>et al.</i> , 2002
EF657337	151329166	MTDNA195	African	L2a	L2a	L2a1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657338	151329180	MTDNA196	African	L3e	L3a1	L3e2a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657341	151329222	MTDNA199	African	L2a	L2a	L2a1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657351	151329362	MTDNA207	African	L1c	L1b2	L1c1	15,445	Herrnstadt <i>et al.</i> , 2002
EF657352	151329376	MTDNA208	African	L2a	L2a	L2a1	15,446	Herrnstadt <i>et al.</i> , 2002
EF657356	151329432	MTDNA211	African	L3e	L3a3	L3e	15,446	Herrnstadt <i>et al.</i> , 2002
EF657360	151329488	MTDNA215	African	L1b	L1a2	L1b1a7	15,446	Herrnstadt <i>et al.</i> , 2002
EF657361	151329501	MTDNA216	African	L3e	L3a3	L3e	15,437	Herrnstadt <i>et al.</i> , 2002
EF657362	151329515	MTDNA217	African	L3e	L3a3	L3e	15,446	Herrnstadt <i>et al.</i> , 2002
EF657368	151329599	MTDNA222	African	L2b	L2b	L2b3	15,447	Herrnstadt <i>et al.</i> , 2002
EF657369	151329613	MTDNA223	African	L2a	L2a	L2a1f	15,446	Herrnstadt <i>et al.</i> , 2002
EF657380	151329767	MTDNA233	African	L2a	L2a	L2a1f	15,446	Herrnstadt <i>et al.</i> , 2002
EF657390	151329907	MTDNA242	African	L3e	L3a2	L3e	15,446	Herrnstadt <i>et al.</i> , 2002
EF657446	151330691	MTDNA293	African	L1b	L1a2	L1b1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657464	151330942	MTDNA309	African	L3b	L3c	L3b	15,445	Herrnstadt <i>et al.</i> , 2002

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
EF657485	151331236	MTDNA328	African	L1c	L1b1	L1c2a	15,448	Herrnstadt <i>et al.</i> , 2002
EF657541	151332019	MTDNA379	African	L1b	L1a2	L1b1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657543	151332046	MTDNA380	African	L2a	L2a	L2a1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657544	151332060	MTDNA381	African	L3d	L3b	L3d	15,446	Herrnstadt <i>et al.</i> , 2002
EF657545	151332074	MTDNA382	African	L2a	L2a	L2a1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657549	151332130	MTDNA386	African	L1b	L1a2	L1b1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657550	151332143	MTDNA387	African	L3e	L3a3	L3e	15,446	Herrnstadt <i>et al.</i> , 2002
EF657551	151332157	MTDNA388	African	L2a	L2a	L2a1	15,446	Herrnstadt <i>et al.</i> , 2002
EF657552	151332171	MTDNA389	African	L2a	L2a	L2a1	15,446	Herrnstadt <i>et al.</i> , 2002
EF657567	151332381	MTDNA401	African	L2a	L2a	L2a1	15,446	Herrnstadt <i>et al.</i> , 2002
EF657580	151332563	MTDNA413	African	L3d	L3b	L3d	15,446	Herrnstadt <i>et al.</i> , 2002
EF657589	151332689	MTDNA421	African	L2a	L2a	L2a1	15,446	Herrnstadt <i>et al.</i> , 2002
EF657603	151332884	MTDNA434	African	L2a	L2a	L2a1	15,446	Herrnstadt <i>et al.</i> , 2002
EF657692	151334130	MTDNA514	African	L1b	L1a2	L1b1a	15,446	Herrnstadt <i>et al.</i> , 2002
EF657743	151334843	MTDNA560	African	L1a	L0c1	L0a1b2	15,446	Herrnstadt <i>et al.</i> , 2002
---	---	KS_CGR_001/1800	!Kung/Southern Africa	---	L0a	L0k1	16,567	Koekemoer, 2010
---	---	KS_CGR_004/1803	!Kung/Namibia	---	L0b	L0d1c1a	16,566	Koekemoer, 2010
---	---	KS_CGR_005/1804	!Kung/Namibia	---	L0b	L0d1c	16,566	Koekemoer, 2010
---	---	KS_CGR_044/1843	!Kung/Angola	---	L0b	L0d2b	16,569	Koekemoer, 2010
---	---	KS_CGR_048/1847	!Kung/Angola	---	L0b	L0d1b	16,567	Koekemoer, 2010
---	---	KS_CGR_056/1855	!Kung/Angola	---	L0b	L0d1b	16,568	Koekemoer, 2010
---	---	KS_CGR_059/1858	!Kung/Angola	---	L0a	L0k1	16,570	Koekemoer, 2010
---	---	KS_CGR_060/1859	!Kung/Angola	---	L0b	L0d1b	16,568	Koekemoer, 2010
---	---	KS_CGR_061/1860	!Kung/Angola	---	L0b	L0d1a	16,568	Koekemoer, 2010

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
---	---	KS_CGR_077/1876	!Kung/Angola	---	L0b	L0d1c1a	16,566	Koekemoer, 2010
---	---	KS_CGR_083/1882	!Kung/Angola	---	L0a	L0k1	16,567	Koekemoer, 2010
---	---	KS_CGR_084/1883	!Kung/Angola	---	L0a	L0k1	16,569	Koekemoer, 2010
---	---	KS_CGR_090/1889	!Kung/Angola	---	L3b	L3d	16,568	Koekemoer, 2010
---	---	KS_CGR_091/1890	!Kung/Angola	---	L0b	L0d1c1b	16,567	Koekemoer, 2010
---	---	KS_CGR_092/1891	!Kung/Namibia	---	L0b	L0d1c1b	16,571	Koekemoer, 2010
---	---	KS_CGR_105/1904	!Kung/Angola	---	L0b	L0d1c1	16,566	Koekemoer, 2010
---	---	KS_CGR_111/1910	!Kung/Angola	---	L0b	L0d1c1b	16,566	Koekemoer, 2010
---	---	KS_CGR_117/1916	!Kung/Angola	---	L0b	L0d1c1b	16,567	Koekemoer, 2010
---	---	KS_CGR_120/1919	!Kung/Angola	---	L0a	L0k1	16,568	Koekemoer, 2010
---	---	KS_CGR_121/1920	!Kung/Angola	---	L0b	L0d1c1a	16,566	Koekemoer, 2010
---	---	KS_CGR_127/1926	!Kung/Namibia	---	L0b	L0d1a	16,568	Koekemoer, 2010
---	---	KS_CGR_140/1939	!Kung/Angola	---	L3a1	L3e	16,569	Koekemoer, 2010
---	---	KS_CGR_143/1942	!Kung/Namibia	---	L3a1	L3e	16,569	Koekemoer, 2010
---	---	KS_CGR_157/1956	!Kung/Angola	---	L0a	L0k1	16,567	Koekemoer, 2010
---	---	KS_CGR_164/1963	!Kung/Namibia	---	L2b	L2b	16,569	Koekemoer, 2010
---	---	KS_CGR_172/1971	!Kung/Angola	---	L3b	L3d	16,568	Koekemoer, 2010
---	---	KS_CGR_173/1972	!Kung/Angola	---	L2b	L2b	16,568	Koekemoer, 2010
---	---	KS_CGR_175/1974	!Kung/Namibia	---	L3a1	L3e	16,568	Koekemoer, 2010
---	---	KS_CGR_176/1975	!Kung/Angola	---	L0a	L0k1	16,568	Koekemoer, 2010
---	---	KS_CGR_010/SA93-10	!Kung/Namibia	---	L0b	L0d1c1b	16,567	Mouton, 2003
---	---	KS_CGR_032/SA93-32	!Kung/South Africa	---	L0b	L0d1c1b	16,567	Mouton, 2003
---	---	KS_CGR_038/SA93-38	!Kung/Namibia	---	L0a	L0k1	16,568	Mouton, 2003
---	---	KS_CGR_09/1868	!Kung/Angola	---	L2b	L2b	16,568	Koekemoer, 2010

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
---	---	KS_CGR_040/SA93-40	!Kung/Angola	---	L0b	L0d1b	16,569	Mouton, 2003
---	---	KS_CGR_052/SA93-52	!Kung/Angola	---	L0b	L0d1	16,569	Mouton, 2003
---	---	KS_CGR_072/SA93-72	!Kung/Angola	---	L0b	L0d1c1b	16,567	Mouton, 2003
---	---	KS_CGR_080/SA93-80	!Kung/Angola	---	L0a	L0k1	16,568	Mouton, 2003
---	---	KS_CGR_082/SA93-82	!Kung/Angola	---	L0b	L0d1c1b	16,567	Mouton, 2003
---	---	KS_CGR_094/SA93-94	!Kung/Angola	---	L0b	L0d1a	16,569	Mouton, 2003
---	---	KS_CGR_102/SA93-102	!Kung/Angola	---	L0b	L0d1c1a	16,567	Mouton, 2003
---	---	KS_CGR_106/SA93-106	!Kung/Angola	---	L0a	L0k1	16,568	Mouton, 2003
---	---	KS_CGR_122/SA93-122	!Kung/Angola	---	L0b	L0d1c1b	16,567	Mouton, 2003
---	---	KS_CGR_130/SA93-130	!Kung/Angola	---	L0b	L0d1a	16,569	Mouton, 2003
---	---	UG_CGR_71473	Acholi	---	L3b\$	L3h1	15,478	Isabirye, 2010
---	---	UG_CGR_71475	Acholi	---	L3c	L3b	15,478	Isabirye, 2010
---	---	UG_CGR_71477	Acholi	---	L3c	L3b	15,478	Isabirye, 2010
---	---	UG_CGR_71472	Acholi	---	L3b\$	L4b2	15,478	Isabirye, 2010
---	---	UG_CGR_71474	Acholi	---	L3b\$	L4a	15,478	Isabirye, 2010
---	---	UG_CGR_71470	Acholi	---	L2d\$	L2a4	15,478	Isabirye, 2010
---	---	UG_CGR_71478	Lugbara	---	L2d\$	L2a4	15,478	Isabirye, 2010
---	---	UG_CGR_71482	Lugbara	---	L2a	L2a1	15,478	Isabirye, 2010
---	---	UG_CGR_71471	Acholi	---	L2d	L2e	15,478	Isabirye, 2010
---	---	UG_CGR_71468	Acholi	---	L0c1	L0a1b1a	15,478	Isabirye, 2010
---	---	UG_CGR_71490	Baganda	---	L3c	L3b	15,478	Isabirye, 2010
---	---	UG_CGR_71493	Baganda	---	L3c	L3b	15,478	Isabirye, 2010
---	---	UG_CGR_71486	Baganda	---	L3b\$	L4a	15,478	Isabirye, 2010
---	---	UG_CGR_71495	Baganda	---	L3a3\$	L3e'l'k'	15,478	Isabirye, 2010

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
---	---	UG_CGR_71496	Baganda	---	L3b\$	L4b	15,478	Isabirye, 2010
---	---	UG_CGR_71487	Lugbara	---	L2a	L2a2'3'	15,478	Isabirye, 2010
---	---	UG_CGR_71489	Baganda	---	L0c1	L0a1b1a	15,478	Isabirye, 2010
---	---	UG_CGR_71443	Baganda	---	L0c1	L0a1b1a	15,478	Isabirye, 2010
---	---	UG_CGR_71492	Baganda	---	L0c1	L0a1a2	15,478	Isabirye, 2010
---	---	UG_CGR_71494	Baganda	---	L0a	L0f	15,478	Isabirye, 2010
---	---	UG_CGR_71656	Baganda	---	L3a3\$	L3e'l'k'	15,478	Isabirye, 2010
---	---	UG_CGR_71677	Lugbara	---	L3c	L3b	15,478	Isabirye, 2010
---	---	UG_CGR_71657	Baganda	---	L3b\$	L4b	15,478	Isabirye, 2010
---	---	UG_CGR_71660	Baganda	---	L3b\$	L4b2	15,478	Isabirye, 2010
---	---	UG_CGR_71674	Lugbara	---	L3b\$	L3h1	15,478	Isabirye, 2010
---	---	UG_CGR_71678	Lugbara	---	L2a	L2a2	15,478	Isabirye, 2010
---	---	UG_CGR_71675	Lugbara	---	L0a\$	L5c	15,478	Isabirye, 2010
---	---	UG_CGR_71676	Lugbara	---	L0a\$	L1c3a	15,478	Isabirye, 2010
---	---	UG_CGR_71655	Baganda	---	L0c2	L0a2a2	15,478	Isabirye, 2010
---	---	UG_CGR_71673	Baganda	---	L0c2	L0a2	15,478	Isabirye, 2010
---	---	UG_CGR_71739	Acholi	---	L3a2	L3	15,478	Isabirye, 2010
---	---	UG_CGR_71699	Lugbara	---	L3b\$	L3f1b	15,478	Isabirye, 2010
---	---	UG_CGR_71708	Lugbara	---	L0L1\$	L4b2	15,478	Isabirye, 2010
---	---	UG_CGR_71679	Lugbara	---	L2a	L2a2	15,478	Isabirye, 2010
---	---	UG_CGR_71738	Acholi	---	L2a	L2a2'3'	15,478	Isabirye, 2010
---	---	UG_CGR_71734	Acholi	---	L2a	L2a4	15,478	Isabirye, 2010
---	---	UG_CGR_71680	Lugbara	---	L2d\$	L2a1c	15,478	Isabirye, 2010

Table B.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
---	---	UG_CGR_71700	Lugbara	---	L1a2	L1b1a	15,478	Isabirye, 2010
---	---	UG_CGR_71696	Lugbara	---	L0a\$	L5a1	15,478	Isabirye, 2010
---	---	UG_CGR_71709	Lugbara	---	L0L1\$	L5a	15,478	Isabirye, 2010

GenBank® accession number = a unique identifier for DNA sequences submitted to the GenBank® database to which information about the DNA sequence is connected; GI number = GenInfo Identifier number that is used to specify a specific DNA sequence; Sequence name/ isolate = the sample name given to the mitochondrial sequence under investigation; Ethnicity/ geographic origin = the place of origin or the ethnicity of the individual to which the mtDNA sequence belongs the ethnicity of the individuals contained in this dataset is discussed in detail in Section 5.11.5 in which the ethnic groups listed in this dataset were connected to the country of origin and region within which the country resides; African American refers to individuals of African origin that reside in the US; Dominican Republic refers to individuals that are of northern and western African origin that reside in the Dominican Republic; the mtDNA sequence isolates with the prefix "KS" belongs to the Khoi-San speaking populations of southern Africa, the term "Khoi-San" here includes all the different names for the Khoi-San speakers of southern Africa such as !Kung as discussed in Section 5.11.5; the mtDNA isolates with a prefix "UG" belong to individuals of Ugandan origin; haplogroup classification was performed by using published haplogroup assignments and two haplogroup classification schemes, a = published in Pereira *et al.* (2009), b = Wallace classification system (2004) as discussed in Section 5.12, c = PhyloTree classification system (Van Oven and Kayser, 2009) as discussed in Section 5.12; \$ = to indicate that the mitochondrial sequence could not be fully resolved by the haplogroup classification scheme used; D38112 = mitochondrial sequence that was retrieved from GenBank® where it is listed as a reference human mtDNA sequence that belongs to an individual from the African country of Uganda; NC_001807 = a NCBI mitochondrial reference sequence that belongs to a western African individual of Yoruban ethnicity; NC_001643 = a NCBI mitochondrial reference sequence representing the mitochondrial genome of a chimpanzee, *Pan troglodytes*; nr. = number; bp. = base pair; CAR = Central African Republic.

APPENDIX C

List of mitochondrial DNA sequences excluded from the Global African dataset to compile an All African dataset

This appendix contains information about the All African mitochondrial genome dataset used in the analyses described in this study (see Section 5.11.2). It consists of mitochondrial genome sequences of indigenous African individuals originating from and residing on the continent of Africa and therefore it is representative of the mitochondrial macrohaplogroup L. The All African dataset was constructed by eliminating the mitochondrial sequences belonging to individuals who did not reside on the African continent from the Global African dataset, as described in Section 5.11.1 and presented in Appendix B. The All African dataset consists of mitochondrial genome sequences generated from a Tswana cohort of 50 individuals residing in the North West Province of South Africa, that was investigated for the purposes of this study (see Appendix A), as well as mitochondrial genomes that were generated in previous PhD studies at the CGR (Koekemoer, 2010; Isabirye, 2010). This consisted of 42 mtDNA sequences from Khoi-San individuals and 39 mtDNA sequences from individuals of Ugandan origin. The same mitochondrial sequences that were retrieved from GenBank[®] for the construction of the Global African dataset were used with the exception of the mitochondrial sequences that belonged to African individuals who did not reside on the African continent. These mitochondrial sequences consisted of one individual from Jordan (Maca-Meyer *et al.*, 2001), 43 individuals from the Dominican Republic (Kivisild *et al.*, 2006; Torroni *et al.*, 2006), three Hispanics (Just *et al.*, 2008) and 140 individuals of African-American origin (Herrnstadt *et al.*, 2002; Just *et al.*, 2008). These are presented in Table C.1.

Table C.1 List of mitochondrial genome sequences excluded from the Global African dataset

GenBank [®] accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
AF381998	17985613	800	Jordan	L3d3	L3b	L3d	16,567	Maca-Meyer <i>et al.</i> , 2001
DQ112686	70955706	AD1	Dominican Republic	L0a2a1	L0c2	L0a2a1	15,574	Kivisild <i>et al.</i> , 2006

Table C.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ112687	70955708	AD2	Dominican Republic	L0a2a1	L0c2	L0a2a1	15,576	Kivisild <i>et al.</i> , 2006
DQ112688	70955710	AD3	Dominican Republic	L0a2a1	L0c2	L0a2a1	15,574	Kivisild <i>et al.</i> , 2006
DQ112689	70955712	AD4	Dominican Republic	L0a2a2	L0c2	L0a2a2	15,574	Kivisild <i>et al.</i> , 2006
DQ112690	70955714	AD5	Dominican Republic	L1b1a3	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112691	70955716	AD6	Dominican Republic	L1b1a3	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112692	70955718	AD7	Dominican Republic	L1b1a	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112693	70955720	AD8	Dominican Republic	L1b1a	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112694	70955722	AD9	Dominican Republic	L1c2b1	L1b1	L1c2b	15,584	Kivisild <i>et al.</i> , 2006
DQ112695	70955724	AD10	Dominican Republic	L1c1b	L1b2	L1c1b	15,574	Kivisild <i>et al.</i> , 2006
DQ112696	70955726	AD11	Dominican Republic	L1c3a	L0,L1	L1c	15,582	Kivisild <i>et al.</i> , 2006
DQ112697	70955728	AD12	Dominican Republic	L1c3b1	L0,L1	L1c	15,582	Kivisild <i>et al.</i> , 2006
DQ112698	70955730	AD13	Dominican Republic	L2a1d	L2a	L2a1	15,585	Kivisild <i>et al.</i> , 2006
DQ112699	70955732	AD14	Dominican Republic	L2a1d	L2a	L2a1	15,585	Kivisild <i>et al.</i> , 2006
DQ112700	70955734	AD15	Dominican Republic	L2a1b2	L2a	L2a1c	15,585	Kivisild <i>et al.</i> , 2006
DQ112701	70955736	AD16	Dominican Republic	L2a1	L2a	L2a1	15,585	Kivisild <i>et al.</i> , 2006
DQ112702	70955738	AD17	Dominican Republic	L2b1	L2b	L2b1a2	15,583	Kivisild <i>et al.</i> , 2006
DQ112703	70955740	AD18	Dominican Republic	L2b1	L2b	L2b1	15,583	Kivisild <i>et al.</i> , 2006
DQ112704	70955742	AD19	Dominican Republic	L2b2	L2b	L2b2	15,585	Kivisild <i>et al.</i> , 2006
DQ112705	70955744	AD20	Dominican Republic	L2b2	L2b	L2b2	15,585	Kivisild <i>et al.</i> , 2006
DQ112706	70955746	AD21	Dominican Republic	L2c	L2c	L2c	15,583	Kivisild <i>et al.</i> , 2006
DQ112707	70955748	AD22	Dominican Republic	L2c1	L2c	L2c	15,583	Kivisild <i>et al.</i> , 2006
DQ112708	70955750	AD23	Dominican Republic	L2d1	L2d\$	L2d1a	15,585	Kivisild <i>et al.</i> , 2006
DQ112709	70955752	AD24	Dominican Republic	L2e	L2d	L2e	15,591	Kivisild <i>et al.</i> , 2006
DQ112710	70955754	AD25	Dominican Republic	L3b2	L3c	L3b2	15,582	Kivisild <i>et al.</i> , 2006
DQ112711	70955756	AD26	Dominican Republic	L3b1a	L3c	L3b	15,582	Kivisild <i>et al.</i> , 2006

Table C.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ112712	70955758	AD27	Dominican Republic	L3b1a	L3c	L3b	15,582	Kivisild <i>et al.</i> , 2006
DQ112713	70955760	AD28	Dominican Republic	L3d2	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112714	70955762	AD29	Dominican Republic	L3d1d	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112715	70955764	AD30	Dominican Republic	L3d1b	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112716	70955766	AD31	Dominican Republic	L3d3	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112717	70955768	AD32	Dominican Republic	L3f1b4	L3b\$	L3f1b	15,582	Kivisild <i>et al.</i> , 2006
DQ112718	70955770	AD33	Dominican Republic	L3h1b1	L3b\$	L3h1	15,583	Kivisild <i>et al.</i> , 2006
DQ112719	70955772	AD34	Dominican Republic	L3e1b	L3a3	L3e	15,585	Kivisild <i>et al.</i> , 2006
DQ112720	70955774	AD35	Dominican Republic	L3e2b2	L3a1	L3e	15,585	Kivisild <i>et al.</i> , 2006
DQ112721	70955776	AD36	Dominican Republic	L3e2b	L3a1	L3e	15,585	Kivisild <i>et al.</i> , 2006
DQ112722	70955778	AD37	Dominican Republic	L3e4	L3a3\$	L3e	15,583	Kivisild <i>et al.</i> , 2006
DQ341058	84682334	Tor29	Dominican Republic	L0a2a	L0c2	L0a2a1	16,558	Torroni <i>et al.</i> , 2006
DQ341059	84682348	Tor7	Dominican Republic	L1c2b1	L1b1	L1c2b	16,584	Torroni <i>et al.</i> , 2006
DQ341062	84682390	Tor38	Dominican Republic	L2d1	L2d\$	L2d1a	16,569	Torroni <i>et al.</i> , 2006
DQ341071	84682516	Tor5	Dominican Republic	L3e2b	L3a1	L3e	16,570	Torroni <i>et al.</i> , 2006
DQ341072	84682530	Tor4	Dominican Republic	L3d1b	L3b	L3d	16,567	Torroni <i>et al.</i> , 2006
DQ341073	84682544	Tor6	Dominican Republic	L3b1a	L3c	L3b	16,567	Torroni <i>et al.</i> , 2006
DQ282505	82494118	L1b-3-01	Hispanic	L1b	L1a2	L1b1a7	16,567	Just <i>et al.</i> , 2008
DQ282506	82494132	L1b-3-02	Hispanic	L1b	L1a2	L1b1a7	16,567	Just <i>et al.</i> , 2008
DQ282507	82494146	L3e-5-01	Hispanic	L3e	L3a3	L3e	16,563	Just <i>et al.</i> , 2008
DQ304897	83265615	L0a-1-01	African American	L0a	L0c1	L0a1b	16,567	Just <i>et al.</i> , 2008
DQ304898	83265629	L0a-1-02	African American	L0a	L0c1	L0a1b	16,567	Just <i>et al.</i> , 2008
DQ304899	83265643	L0a-1-03	African American	L0a	L0c1	L0a1b1a	16,567	Just <i>et al.</i> , 2008
DQ304900	83265657	L0a-1-04	African American	L0a	L0c1	L0a1b1	16,567	Just <i>et al.</i> , 2008
DQ304901	83265671	L0a-2-01	African American	L0a	L0c1	L0a1a2	16,568	Just <i>et al.</i> , 2008

Table C.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ304902	83265685	L0a-2-02	African American	L0a	L0c1	L0a1a2	16,567	Just <i>et al.</i> , 2008
DQ304903	83265699	L0a-2-03	African American	L0a	L0c1	L0a1a2	16,567	Just <i>et al.</i> , 2008
DQ304904	83265713	L0a-2-04	African American	L0a	L0c1	L0a1a2	16,567	Just <i>et al.</i> , 2008
DQ304905	83265727	L1b-1-01	African American	L1b	L1a2	L1b1a	16,569	Just <i>et al.</i> , 2008
DQ304906	83265741	L1b-1-02	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304907	83265755	L1b-1-03	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304908	83265769	L1b-1-04	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304909	83265783	L1b-1-05	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304910	83265797	L1b-1-06	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304911	83265811	L1b-1-07	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304912	83265825	L1b-1-08	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304913	83265839	L1b-1-09	African American	L1b	L1a2	L1b1a	16,569	Just <i>et al.</i> , 2008
DQ304914	83265853	L1b-1-10	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304915	83265867	L1b-1-11	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304916	83265881	L1b-1-12	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304917	83265895	L1b-1-13	African American	L1b	L1a2	L1b1a	16,568	Just <i>et al.</i> , 2008
DQ304918	83265909	L1b-1-14	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304919	83265923	L1b-2-01	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304920	83265937	L1b-2-02	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304921	83265951	L1b-2-03	African American	L1b	L1a2	L1b1a7	16,572	Just <i>et al.</i> , 2008
DQ304922	83265965	L1b-2-04	African American	L1b	L1a2	L1b1a	16,567	Just <i>et al.</i> , 2008
DQ304923	83265979	L1b-2-05	African American	L1b	L1a2	L1b1a7	16,567	Just <i>et al.</i> , 2008
DQ304924	83265993	L2a-1-01	African American	L2a	L2a	L2a1a	16,570	Just <i>et al.</i> , 2008
DQ304925	83266007	L2a-1-02	African American	L2a	L2a	L2a1a	16,574	Just <i>et al.</i> , 2008
DQ304926	83266021	L2a-1-03	African American	L2a	L2a	L2a1a	16,571	Just <i>et al.</i> , 2008

Table C.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ304927	83266035	L2a-1-04	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304928	83266049	L2a-1-05	African American	L2a	L2a	L2a1a	16,568	Just <i>et al.</i> , 2008
DQ304929	83266063	L2a-1-06	African American	L2a	L2a	L2a1	16,567	Just <i>et al.</i> , 2008
DQ304930	83266077	L2a-1-07	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304931	83266091	L2a-1-08	African American	L2a	L2a	L2a1	16,567	Just <i>et al.</i> , 2008
DQ304932	83266105	L2a-1-09	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304933	83266119	L2a-1-10	African American	L2a	L2a	L2a1a	16,571	Just <i>et al.</i> , 2008
DQ304934	83266133	L2a-2-01	African American	L2a	L2a	L2a1	16,573	Just <i>et al.</i> , 2008
DQ304935	83266147	L2a-2-02	African American	L2a	L2a	L2a1f	16,571	Just <i>et al.</i> , 2008
DQ304936	83266161	L2a-2-03	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304937	83266175	L2a-2-04	African American	L2a	L2a	L2a1	16,572	Just <i>et al.</i> , 2008
DQ304938	83266189	L2a-3-01	African American	L2a	L2a	L2a1	16,560	Just <i>et al.</i> , 2008
DQ304939	83266203	L2a-3-02	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304940	83266217	L2a-3-03	African American	L2a	L2a	L2a1	16,559	Just <i>et al.</i> , 2008
DQ304941	83266231	L2a-3-04	African American	L2a	L2a	L2a1	16,569	Just <i>et al.</i> , 2008
DQ304942	83266245	L2a-4-01	African American	L2a	L2a	L2a1c	16,568	Just <i>et al.</i> , 2008
DQ304943	83266259	L2a-4-02	African American	L2a	L2a	L2a1c	16,568	Just <i>et al.</i> , 2008
DQ304944	83266273	L2a-4-03	African American	L2a	L2a	L2a1c	16,569	Just <i>et al.</i> , 2008
DQ304945	83266287	L2a-4-04	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304946	83266301	L2a-4-05	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304947	83266315	L2a-4-06	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304948	83266329	L2a-4-07	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304949	83266343	L2a-4-09	African American	L2a	L2a	L2a1c	16,568	Just <i>et al.</i> , 2008
DQ304950	83266357	L2a-4-10	African American	L2a	L2a	L2a1c	16,567	Just <i>et al.</i> , 2008
DQ304951	83266371	L2a-4-11	African American	L2a	L2a	L2a1c	16,568	Just <i>et al.</i> , 2008

Table C.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ304952	83266385	L2a-5-01	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304953	83266399	L2a-5-02	African American	L2a	L2a	L2a1f	16,571	Just <i>et al.</i> , 2008
DQ304954	83266413	L2a-5-03	African American	L2a	L2a	L2a1f	16,571	Just <i>et al.</i> , 2008
DQ304955	83266427	L2a-5-04	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304956	83266441	L2a-5-05	African American	L2a	L2a	L2a1f	16,570	Just <i>et al.</i> , 2008
DQ304957	83266455	L2a-5-06	African American	L2a	L2a	L2a1f	16,568	Just <i>et al.</i> , 2008
DQ304958	83266469	L2a-5-07	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304959	83266483	L2a-5-08	African American	L2a	L2a	L2a1	16,571	Just <i>et al.</i> , 2008
DQ304960	83266497	L2a-5-09	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304961	83266511	L2a-5-10	African American	L2a	L2a	L2a1	16,571	Just <i>et al.</i> , 2008
DQ304962	83266525	L2a-5-11	African American	L2a	L2a	L2a1f	16,571	Just <i>et al.</i> , 2008
DQ304963	83266539	L2a-5-12	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304964	83266553	L2a-5-13	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304965	83266567	L2a-5-14	African American	L2a	L2a	L2a1f	16,568	Just <i>et al.</i> , 2008
DQ304966	83266581	L2a-5-15	African American	L2a	L2a	L2a1	16,570	Just <i>et al.</i> , 2008
DQ304967	83266595	L2a-5-16	African American	L2a	L2a	L2a1	16,571	Just <i>et al.</i> , 2008
DQ304968	83266609	L2a-6-01	African American	L2a	L2a	L2a1a	16,570	Just <i>et al.</i> , 2008
DQ304969	83266623	L2a-6-02	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304970	83266637	L2a-6-03	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304971	83266651	L2a-6-04	African American	L2a	L2a	L2a1a	16,571	Just <i>et al.</i> , 2008
DQ304972	83266665	L2a-6-05	African American	L2a	L2a	L2a1a	16,571	Just <i>et al.</i> , 2008
DQ304973	83266679	L2a-6-06	African American	L2a	L2a	L2a1a	16,570	Just <i>et al.</i> , 2008
DQ304974	83266693	L2a-6-07	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304975	83266707	L2a-6-08	African American	L2a	L2a	L2a1a	16,570	Just <i>et al.</i> , 2008
DQ304976	83266721	L2a-6-09	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008

Table C.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ304977	83266735	L2a-6-12	African American	L2a	L2a	L2a1a	16,569	Just <i>et al.</i> , 2008
DQ304978	83266749	L2b-1-01	African American	L2b	L2b	L2b	16,568	Just <i>et al.</i> , 2008
DQ304979	83266763	L2b-1-02	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304980	83266777	L2b-1-03	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304981	83266791	L2b-1-04	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304982	83266805	L2b-1-05	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304983	83266819	L2b-1-07	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304984	83266833	L2b-1-08	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304985	83266847	L2b-1-09	African American	L2b	L2b	L2b	16,567	Just <i>et al.</i> , 2008
DQ304986	83266861	L2c-1-01	African American	L2c	L2c	L2c	16,567	Just <i>et al.</i> , 2008
DQ304987	83266875	L2c-1-02	African American	L2c	L2c	L2c	16,568	Just <i>et al.</i> , 2008
DQ304988	83266889	L2c-1-03	African American	L2c	L2c	L2c	16,568	Just <i>et al.</i> , 2008
DQ304989	83266903	L2c-1-04	African American	L2c	L2c	L2c	16,567	Just <i>et al.</i> , 2008
DQ304990	83266917	L3b-1-01	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304991	83266931	L3b-1-02	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304992	83266945	L3b-1-03	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304993	83266959	L3b-2-01	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304994	83266973	L3b-2-02	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304995	83266987	L3b-2-03	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304996	83267001	L3b-2-04	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304997	83267015	L3b-2-05	African American	L3b	L3c	L3b	16,566	Just <i>et al.</i> , 2008
DQ304998	83267029	L3e-1-01	African American	L3e	L3a1	L3e	16,570	Just <i>et al.</i> , 2008
DQ304999	83267043	L3e-1-02	African American	L3e	L3a1	L3e	16,572	Just <i>et al.</i> , 2008
DQ305000	83267057	L3e-1-03	African American	L3e	L3a1	L3e	16,571	Just <i>et al.</i> , 2008
DQ305001	83267071	L3e-1-04	African American	L3e	L3a1	L3e	16,571	Just <i>et al.</i> , 2008

Table C.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ305002	83267085	L3e-1-05	African American	L3e	L3a1	L3e	16,571	Just <i>et al.</i> , 2008
DQ305003	83267099	L3e-1-06	African American	L3e	L3a1	L3e	16,570	Just <i>et al.</i> , 2008
DQ305004	83267113	L3e-1-07	African American	L3e	L3a1	L3e	16,570	Just <i>et al.</i> , 2008
DQ305005	83267127	L3e-1-08	African American	L3e	L3a1	L3e	16,571	Just <i>et al.</i> , 2008
DQ305006	83267141	L3e-1-09	African American	L3e	L3a1	L3e	16,570	Just <i>et al.</i> , 2008
DQ305007	83267155	L3e-1-10	African American	L3e	L3a1	L3e	16,572	Just <i>et al.</i> , 2008
DQ305008	83267169	L3e-1-11	African American	L3e	L3a1	L3e	16,572	Just <i>et al.</i> , 2008
DQ305009	83267183	L3e-1-12	African American	L3e	L3a1	L3e	16,571	Just <i>et al.</i> , 2008
DQ305010	83267197	L3e-2-01	African American	L3e	L3a2	L3e	16,567	Just <i>et al.</i> , 2008
DQ305011	83267211	L3e-2-02	African American	L3e	L3a2	L3e	16,567	Just <i>et al.</i> , 2008
DQ305012	83267225	L3e-2-03	African American	L3e	L3a2	L3e	16,572	Just <i>et al.</i> , 2008
DQ305013	83267239	L3e-2-04	African American	L3e	L3a2	L3e	16,568	Just <i>et al.</i> , 2008
DQ305014	83267253	L3e-2-05	African American	L3e	L3a2	L3e	16,572	Just <i>et al.</i> , 2008
DQ305015	83267267	L3e-2-06	African American	L3e	L3a2	L3e	16,567	Just <i>et al.</i> , 2008
DQ305016	83267281	L3e-2-07	African American	L3e	L3a2	L3e	16,568	Just <i>et al.</i> , 2008
DQ305017	83267295	L3e-2-08	African American	L3e	L3a2	L3e	16,567	Just <i>et al.</i> , 2008
DQ305018	83267309	L3e-3-01	African American	L3e	L3a1	L3e	16,572	Just <i>et al.</i> , 2008
DQ305019	83267323	L3e-3-02	African American	L3e	L3a1	L3e	16,571	Just <i>et al.</i> , 2008
DQ305020	83267337	L3e-3-03	African American	L3e	L3a1	L3e	16,572	Just <i>et al.</i> , 2008
DQ305021	83267351	L3e-4-01	African American	L3e	L3a1	L3e	16,570	Just <i>et al.</i> , 2008
DQ305022	83267365	L3e-4-02	African American	L3e	L3a1	L3e	16,572	Just <i>et al.</i> , 2008
DQ305023	83267379	L3e-4-03	African American	L3e	L3a1	L3e	16,568	Just <i>et al.</i> , 2008
DQ305024	83267393	L3e-6-01	African American	L3e	L3a1	L3e2a	16,570	Just <i>et al.</i> , 2008
DQ305025	83267407	L3e-6-02	African American	L3e	L3a1	L3e2a	16,570	Just <i>et al.</i> , 2008
DQ305026	83267421	L3e-6-03	African American	L3e	L3a1	L3e2a	16,570	Just <i>et al.</i> , 2008

Table C.1 Continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ305027	83267435	L3e-6-04	African American	L3e	L3a1	L3e2a	16,570	Just <i>et al.</i> , 2008
DQ305028	83267449	L3e-6-05	African American	L3e	L3a1	L3e2a	16,569	Just <i>et al.</i> , 2008
DQ305029	83267463	L3e-6-06	African American	L3e	L3a1	L3e2a	16,569	Just <i>et al.</i> , 2008
DQ305030	83267477	L3e-6-07	African American	L3e	L3a1	L3e2a	16,569	Just <i>et al.</i> , 2008
DQ305031	83267491	L3e-6-08	African American	L3e	L3a1	L3e2a	16,569	Just <i>et al.</i> , 2008
DQ305032	83267505	L3f-1-01	African American	L3f	L3b\$	L3f1b	16,568	Just <i>et al.</i> , 2008
DQ305033	83267519	L3f-1-02	African American	L3f	L3b\$	L3f1b	16,569	Just <i>et al.</i> , 2008
DQ305034	83267533	L3f-1-03	African American	L3f	L3b\$	L3f1b	16,569	Just <i>et al.</i> , 2008
DQ305035	83267547	L3f-1-04	African American	L3f	L3b\$	L3f1b	16,569	Just <i>et al.</i> , 2008
DQ305036	83267561	L3f-1-05	African American	L3f	L3b\$	L3f1b	16,568	Just <i>et al.</i> , 2008

GenBank® accession number = a unique identifier for DNA sequences submitted to the GenBank® database to which information about the DNA sequence is connected; GI number = GenInfo Identifier number that is used to specify a specific DNA sequence; Sequence name/ isolate = the sample name given to the mitochondrial sequence under investigation; Ethnicity/ geographic origin = the place of origin or the ethnicity of the individual to whom the mtDNA sequence belongs the ethnicity of the individuals contained in this dataset is discussed in detail in Section 5.11.5 in which the ethnic groups listed in this dataset are connected to the country of origin and region within which the country resides; African American refers to individuals of African origin who reside in the US; Dominican Republic refers to individuals who are of northern and western African origin who reside in the Dominican Republic; haplogroup classification was performed by using published haplogroup assignments and two haplogroup classification schemes, a = published in Pereira *et al.*, 2009, b = Wallace classification system (2004) as discussed in Section 5.12, c = PhyloTree classification system (Van Oven and Kayser, 2009) as discussed in Section 5.12; \$ = to indicate that the mitochondrial sequence could not be fully resolved by the haplogroup classification scheme that was used; No. of bp. = refers to the length of the mitochondrial sequence.

APPENDIX D

Regional mitochondrial DNA genome datasets used in this study

This appendix contains information about the regional mtDNA genome datasets used for the statistical analyses of the sequence variation contained in the mitochondrial genomes of the All African dataset, as discussed in Section 5.11.2. The ethnicity of the mtDNA sequences obtained from GenBank® and used in the datasets of this investigation were published in a study by Pereira *et al.* (2009), according to country of origin or ethnic group. These ethnicities and countries were representative of broad African regions according to the CIA World Information; Chen *et al.* (1995a), Torroni *et al.* (2001) and Salas *et al.* (2002), as described in Section 5.11.5. Three subsets were constructed for the purpose of statistical analysis of the genetic diversity of the western, eastern and southern African regions and were referred to as the Western African dataset (4), Eastern African dataset (5) and Southern African dataset (6) respectively. The Western African dataset (4) consisted of 60 mtDNA sequences, the Eastern African dataset consisted of 110 mtDNA sequences and the Southern African dataset consisted of 66 mtDNA sequences. The All African dataset of this investigation did not contain a sufficient number of mitochondrial sequences from individuals of northern African origin and therefore this group was not included in this investigation. The full list of mitochondrial sequences for each of the regional datasets 4, 5 and 6 is presented in Table D.1.

Haplogroup and sub-haplogroup assignments of the mitochondrial genomes are also indicated in Table D.1. The haplogroup assignments of the GenBank® mitochondrial genomes, as published by Pereira *et al.* (2009), were used in conjunction with the haplogroup assignments of all the mitochondrial genomes by using two haplogroup classification schemes. These classification schemes consisted of the Wallace classification system (Wallace, 2004) and the PhyloTree classification system (Van Oven and Kayser, 2009), as described in Section 5.12. The mitochondrial sequence haplogroups generated in this investigation and the mitochondrial sequence haplogroups generated by other PhD studies at the CGR (Koekemoer, 2010; Isabirye, 2010) have not been published yet as in the case of the mitochondrial sequences retrieved from GenBank® (Pereira *et al.*, 2009).

Table D.1 Mitochondrial sequences that represented individuals of Western African origin

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
WESTERN AFRICAN DATASET (DATASET 4)								
EF184613	133854987	CAPL081_ L1c	Bakola/ Cameroon	L1c	L1b2	L1c1	16,567	Gonder <i>et al.</i> , 2007
EF184614	133855001	CAPL079_ L1c	Bakola/ Cameroon	L1c	L2d\$	L1c	16,567	Gonder <i>et al.</i> , 2007
EF184615	133855015	CAPL029_ L1c	Bakola/ Cameroon	L1c	L1b2	L1c1	16,567	Gonder <i>et al.</i> , 2007
EF184616	133855029	CAPL006_ L1c	Bakola/ Cameroon	L1c	L1b2	L1c1	16,567	Gonder <i>et al.</i> , 2007
AF346976	13272738	eff 004	Effik/Africa	L2a1i	L2a	L2a	16,570	Ingman <i>et al.</i> , 2000
AF346977	13272752	eff007	Effik/Africa	L2a1a	L2a	L2a1a	16,569	Ingman <i>et al.</i> , 2000
AF346980	13272794	ewon w77	Ewondo	L3e1f	L3a3	L3e2a	16,570	Ingman <i>et al.</i> , 2000
AF346986	13272878	ibo 006	Ibo/Africa	L1b1a3	L1a2	L1b1a	16,567	Ingman <i>et al.</i> , 2000
AF346987	13272892	ibo 12	Ibo/Africa	L1c1d	L1b2	L1c1d	16,566	Ingman <i>et al.</i> , 2000
DQ341070	84682502	Tor79	Nigeria	L3e5	L3a3\$	L3e	16,567	Torrioni <i>et al.</i> , 2006
DQ341075	84682572	Tor80	Nigeria	L3f3	L3b\$	L3f3	16,568	Torrioni <i>et al.</i> , 2006
AF346985	13272864	haus 004	Hausa/Africa	L0a1a	L0c1	L0a1a	16,567	Ingman <i>et al.</i> , 2000
AF347014	13273270	yoru 002	Yoruba	L3d1a	L3b	L3d	16,567	Ingman <i>et al.</i> , 2000
AF347015	13273284	yoru 013	Yoruba	L3e2b1	L3a1	L3e	16,571	Ingman <i>et al.</i> , 2000
NC_001807 ^c	17981852	---	Yoruba	L3e2b1	L3a1	L3e	16,571	Ingman <i>et al.</i> , 2000
DQ112723	70955780	AF83	Mossi/ Burkina Faso	L2a1b	L2a	L2a1c	15,583	Kivisild <i>et al.</i> , 2006
DQ112724	70955782	AF84	Mossi/ Burkina Faso	L2a1d	L2a	L2a1f	15,585	Kivisild <i>et al.</i> , 2006
DQ112725	70955784	AF82	Mossi/ Burkina Faso	L2a1b	L2a	L2a1c	15,583	Kivisild <i>et al.</i> , 2006
DQ112726	70955786	AF65	Rimaibe/ Burkina Faso	L3e2a	L3a1	L3e2a	15,585	Kivisild <i>et al.</i> , 2006
DQ112727	70955788	AF91	Rimaibe/ Burkina Faso	L1b1a	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112728	70955790	AF66	Rimaibe/ Burkina Faso	L3e2a	L3a1	L3e2a	15,585	Kivisild <i>et al.</i> , 2006
DQ112729	70955792	AF63	Rimaibe/ Burkina Faso	L3e2a	L3a1	L3e2a	15,585	Kivisild <i>et al.</i> , 2006
DQ112730	70955794	AF79	Rimaibe/ Burkina Faso	L2a1b2	L2a	L2a1c	15,585	Kivisild <i>et al.</i> , 2006

Table D.1 continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ112731	70955796	AF80	Rimaibe/ Burkina Faso	L2a1d	L2a	L2a1f	15,585	Kivisild <i>et al.</i> , 2006
DQ112732	70955798	AF92	Rimaibe/ Burkina Faso	L0a1a	L0c1	L0a1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112733	70955800	AF90	Mossi/ Burkina Faso	L1b1a	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112734	70955802	AF67	Rimaibe/ Burkina Faso	L3e2b1	L3a1	L3e	15,585	Kivisild <i>et al.</i> , 2006
DQ112735	70955804	AF81	Rimaibe/ Burkina Faso	L2c	L2c	L2c	15,583	Kivisild <i>et al.</i> , 2006
DQ112736	70955806	AF86	Rimaibe/ Burkina Faso	L3f1b	L3b\$	L3f1b	15,582	Kivisild <i>et al.</i> , 2006
DQ112737	70955808	AF87	Foulbe/ Burkina Faso	L1b	L1a2	L1b1	15,583	Kivisild <i>et al.</i> , 2006
DQ112738	70955810	AF68	Foulbe/ Burkina Faso	L3b1b	L3c	L3b1a	15,582	Kivisild <i>et al.</i> , 2006
DQ112739	70955812	AF69	Foulbe/ Burkina Faso	L3d1b	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112740	70955814	AF64	Foulbe/ Burkina Faso	L3e2a	L3a1	L3e2a	15,585	Kivisild <i>et al.</i> , 2006
DQ112741	70955816	AF88	Foulbe/ Burkina Faso	L1b1b	L1a2	L1b1	15,583	Kivisild <i>et al.</i> , 2006
DQ112742	70955818	AF70	Foulbe/ Burkina Faso	L3b1a	L3c	L3b	15,582	Kivisild <i>et al.</i> , 2006
DQ112743	70955820	AF71	Foulbe/ Burkina Faso	L3b1a	L3c	L3b	15,582	Kivisild <i>et al.</i> , 2006
DQ112744	70955822	AF72	Foulbe/ Burkina Faso	L3d1fa	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112745	70955824	AF73	Foulbe/ Burkina Faso	L3b1b	L3c	L3b1a	15,582	Kivisild <i>et al.</i> , 2006
DQ112746	70955826	AF74	Mossi/ Burkina Faso	L3b2	L3c	L3b1a	15,584	Kivisild <i>et al.</i> , 2006
DQ112747	70955828	AF75	Mossi/ Burkina Faso	L3e3b	L3a2	L3e	15,585	Kivisild <i>et al.</i> , 2006
DQ112748	70955830	AF76	Mossi/ Burkina Faso	L3b1a	L3c	L3b	15,582	Kivisild <i>et al.</i> , 2006
DQ112756	70955846	AF77	Mossi/ Burkina Faso	L3d2	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112757	70955848	AF78	Mossi/ Burkina Faso	L3e5	L3a3\$	L3e	15,583	Kivisild <i>et al.</i> , 2006
DQ112758	70955850	AF85	Mossi/ Burkina Faso	L2a1b2	L2a	L2a1c	15,582	Kivisild <i>et al.</i> , 2006
DQ112759	70955852	AF89	Foulbe/ Burkina Faso	L1b1b	L1a2	L1b1	15,583	Kivisild <i>et al.</i> , 2006
DQ112903	70956140	AF31	Pygmy/Zaire	L2a2a	L2a	L2a2	15,585	Kivisild <i>et al.</i> , 2006

Table D.1 continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ112904	70956142	AF05	Pygmy/Zaire	L0a2b	L0c2	L0a2b	15,574	Kivisild <i>et al.</i> , 2006
DQ112905	70956144	AF32	Pygmy/Zaire	L2a2b	L2a	L2a2	15,585	Kivisild <i>et al.</i> , 2006
DQ112906	70956146	AF33	Pygmy/Zaire	L0a2b	L0c2	L0a2b	15,576	Kivisild <i>et al.</i> , 2006
DQ112909	70956152	AF04	Pygmy/Zaire	L2a2	L2a	L2a2	15,585	Kivisild <i>et al.</i> , 2006
DQ112911	70956156	AF52	Pygmy/Zaire	L2a2b	L2a	L2a2	15,585	Kivisild <i>et al.</i> , 2006
DQ112915	70956164	AF97	Pygmy/Zaire	L0a2b	L0c2	L0a2b1	15,576	Kivisild <i>et al.</i> , 2006
DQ112916	70956166	AF36	Pygmy/Zaire	L2a2b	L2a	L2a2	15,585	Kivisild <i>et al.</i> , 2006
DQ112917	70956168	AF37	Pygmy/Zaire	L0a2b	L0c2	L0a2b	15,576	Kivisild <i>et al.</i> , 2006
DQ112918	70956170	AF98	Pygmy/Zaire	L0a2b	L0c2	L0a2b	15,576	Kivisild <i>et al.</i> , 2006
DQ112921	70956176	AF99	Pygmy/Zaire	L5a1c	L0\$a	L5a1	15,586	Kivisild <i>et al.</i> , 2006
DQ112922	70956178	AF100	Pygmy/Zaire	L5a1c	L0\$a	L5a1	15,586	Kivisild <i>et al.</i> , 2006
DQ112924	70956182	AF101	Pygmy/Zaire	L2a2b	L2a	L2a2	15,585	Kivisild <i>et al.</i> , 2006
DQ112925	70956184	AF96	Pygmy/Zaire	L1c1a2a	L1b2	L1c1	15,582	Kivisild <i>et al.</i> , 2006
DQ112829	70955992	AF53	Ghana	L1b1a	L1a2	L1b1a	15,583	Kivisild <i>et al.</i> , 2006
EASTERN AFRICAN DATASET (DATASET 5)								
DQ112777	70955888	AF16	Nuba/Sudan	L0a1b2	L0c1	L0a1b	15,583	Kivisild <i>et al.</i> , 2006
DQ112778	70955890	AF14	Nuba/Sudan	L2a2a	L2a	L2a2a	15,585	Kivisild <i>et al.</i> , 2006
DQ112949	70956232	AF50	Sudan	L3d1'2'3'	L3b	L3d	15,585	Kivisild <i>et al.</i> , 2006
DQ112956	70956246	AF45	Sudan	L3j	L3b\$	L3cd	15,583	Kivisild <i>et al.</i> , 2006
DQ112957	70956248	AF46	Sudan	L3h1a1	L3b\$	L3h1	15,585	Kivisild <i>et al.</i> , 2006
DQ112958	70956250	AF47	Sudan	L3i1a	L3a3\$	L3e'l'k'	15,585	Kivisild <i>et al.</i> , 2006
DQ112959	70956252	AF48	Sudan	L0a1a	L0c2\$	L0a1a	15,583	Kivisild <i>et al.</i> , 2006
DQ112960	70956254	AF49	Sudan	L3i1a	L3a3\$	L3e'l'k'	15,585	Kivisild <i>et al.</i> , 2006
DQ112961	70956256	AF51	Sudan	L3h1a1	L3b\$	L3h1	15,585	Kivisild <i>et al.</i> , 2006
EF184580	133854527	TZSW053_L5	Tanzania	L5	L0\$b	L5	16,559	Gonder <i>et al.</i> , 2007
EF184581	133854541	TZSW087_L5	Tanzania	L5	L0\$b	L5	16,560	Gonder <i>et al.</i> , 2007
EF184582	133854555	TZMW009_L5	Tanzania	L5	L0\$a	L5c	16,570	Gonder <i>et al.</i> , 2007

Table D.1 continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
EF184583	133854569	TZSW086_L5	Tanzania	L5	L0\$b	L5	16,559	Gonder <i>et al.</i> , 2007
EF184584	133854583	TZSW055_L5	Tanzania	L5	L0\$b	L5	16,560	Gonder <i>et al.</i> , 2007
EF184585	133854597	Tzsw109_L0d	Tanzania	L0d	L0a	L0d3	16,567	Gonder <i>et al.</i> , 2007
EF184586	133854611	Tzsw084	Tanzania	L0d	L0b	L0d1b	16,568	Gonder <i>et al.</i> , 2007
EF184587	133854625	Tzsw068	Tanzania	L0d	L0a	L0d3	16,569	Gonder <i>et al.</i> , 2007
EF184588	133854639	Tzsw010	Tanzania	L0d	L0a	L0d3	16,569	Gonder <i>et al.</i> , 2007
EF184589	133854653	Tzbg031	Tanzania	L0d	L2a	L0d3	16,569	Gonder <i>et al.</i> , 2007
EF184595	133854737	TZWF021	Tanzania	L0f	L2a	L0f2	16,568	Gonder <i>et al.</i> , 2007
EF184596	133854751	TZAK002	Tanzania	L0f	L2d	L0f	16,568	Gonder <i>et al.</i> , 2007
EF184597	133854765	TZTR029	Tanzania	L0f	L0a	L0f	16,570	Gonder <i>et al.</i> , 2007
EF184598	133854779	TZBG034	Tanzania	L0f	L0a	L0f2	16,566	Gonder <i>et al.</i> , 2007
EF184600	133854807	TZGG017	Tanzania	L0f	L0\$a	L0f2	16,568	Gonder <i>et al.</i> , 2007
EF184601	133854821	TZDT067	Tanzania	L0a	L0c1	L0a1b	16,568	Gonder <i>et al.</i> , 2007
EF184602	133854835	TZSW038	Tanzania	L0a	L0c2	L0a2	16,559	Gonder <i>et al.</i> , 2007
EF184603	133854849	TZPR030	Tanzania	L0a	L0c2	L0a2a1	16,559	Gonder <i>et al.</i> , 2007
EF184604	133854863	Tzsw050	Tanzania	L0a	L0c2	L0a2	16,557	Gonder <i>et al.</i> , 2007
EF184605	133854877	tztr002	Tanzania	L0a	L0c2	L0a2a2	16,559	Gonder <i>et al.</i> , 2007
EF184606	133854891	Tzsw005	Tanzania	L0a	L0c2	L0a2	16,559	Gonder <i>et al.</i> , 2007
EF184607	133854905	tzsw015	Tanzania	L0a	L2a	L0a2	16,558	Gonder <i>et al.</i> , 2007
EF184608	133854919	TZTR001	Tanzania	L0a	L2a	L0a2	16,560	Gonder <i>et al.</i> , 2007
EF184612	133854973	TZTR031	Tanzania	L1c	L0,L1	L1c	16,567	Gonder <i>et al.</i> , 2007
EF184617	133855043	Tzbg037	Tanzania	L2a	L2a	L2a1c	16,570	Gonder <i>et al.</i> , 2007
EF184618	133855057	Tzhz037	Tanzania	L2a	L2a	L2a1	16,570	Gonder <i>et al.</i> , 2007
EF184619	133855070	Tzhz077	Tanzania	L2a	L2a	L2a1	16,570	Gonder <i>et al.</i> , 2007
EF184620	133855083	tztr037	Tanzania	L2a	L2a	L2a1	16,571	Gonder <i>et al.</i> , 2007
EF184621	133855097	tzms014	Tanzania	L2	L2d\$	L2d1a	16,569	Gonder <i>et al.</i> , 2007
EF184622	133855111	TZHZ251_L3h	Tanzania	L3h	L3b\$	L3h1	16,570	Gonder <i>et al.</i> , 2007

Table D.1 continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
EF184623	133855125	Tzbg004_L3	Tanzania	L3	L3b	L3d	16,568	Gonder <i>et al.</i> , 2007
EF184624	133855139	Tzhz032_L3f	Tanzania	L3f	L3b\$	L3h1	16,570	Gonder <i>et al.</i> , 2007
EF184625	133855153	Tzhz061_L3f	Tanzania	L3f	L3b\$	L3a	16,572	Gonder <i>et al.</i> , 2007
EF184627	133855181	Tzsw011_L3g	Tanzania	L3g	L3b\$	L3\$	16,570	Gonder <i>et al.</i> , 2007
EF184628	133855195	tztr007_L3d	Tanzania	L3d	L3b	L3d	16,568	Gonder <i>et al.</i> , 2007
EF184629	133855209	tztr023_L3g	Tanzania	L3g	L3b\$	L3\$	16,570	Gonder <i>et al.</i> , 2007
EF184630	133855223	Tztr024_L3	Tanzania	L3	L3b\$	L3a	16,568	Gonder <i>et al.</i> , 2007
EF184631	133855237	TZRG044_L3	Tanzania	L3	L3b\$	L3h1	16,569	Gonder <i>et al.</i> , 2007
EF184632	133855251	TZIQ006_L3	Tanzania	L3	L3b\$	L3h1	16,569	Gonder <i>et al.</i> , 2007
EF184639	133855349	TZIQ053_L3	Tanzania	L3	L3b\$	L3\$	16,570	Gonder <i>et al.</i> , 2007
EF184640	133855363	TZHZ081_L3	Tanzania	L3	L3b\$	---	16,569	Gonder <i>et al.</i> , 2007
EF184641	133855376	TZMW031_L3	Tanzania	L3	L3b	L3d	16,568	Gonder <i>et al.</i> , 2007
DQ112782	70955898	AF10	Berta/ Ethiopia	L2a1	L2a	L2a1	15,585	Kivisild <i>et al.</i> , 2006
DQ112932	70956198	AF42	Ethiopia	U1a	L3b\$	---	15,584	Kivisild <i>et al.</i> , 2006
DQ112934	70956202	AF44	Ethiopia	L0f2a	L0a	L0f	15,585	Kivisild <i>et al.</i> , 2006
DQ341060	84682362	Tor74	Ethiopia	L5a1a	L0\$a	L5a1a	16,570	Torrioni <i>et al.</i> , 2006
DQ341061	84682376	Tor68	Ethiopia	L5c1	L0\$a	L5c1	16,571	Torrioni <i>et al.</i> , 2006
DQ341063	85541074	Tor39	Ethiopia	L6b	L2d\$	L6b	16,572	Torrioni <i>et al.</i> , 2006
DQ341064	84682418	Tor66	Ethiopia	L4a1	L3b\$	L4a1	16,569	Torrioni <i>et al.</i> , 2006
DQ341065	84682432	Tor71	Ethiopia	L4b2a1	L3b\$	L4b2	16,567	Torrioni <i>et al.</i> , 2006
DQ341066	84682446	Tor72	Ethiopia	L3x2a	L3a3\$	L3e'l'k'	16,574	Torrioni <i>et al.</i> , 2006
DQ341067	84682460	Tor82	Ethiopia	L3x1	L3a3\$	L3e'l'k'	16,570	Torrioni <i>et al.</i> , 2006
DQ341068	84682474	Tor70	Ethiopia	L3i2	L3a3\$	L3b'f	16,566	Torrioni <i>et al.</i> , 2006
DQ341069	84682488	Tor69	Ethiopia	L3i1b	L3a3\$	L3e'l'k'	16,571	Torrioni <i>et al.</i> , 2006
DQ341074	84682558	Tor84	Ethiopia	L3c	L3b\$	L3c	16,568	Torrioni <i>et al.</i> , 2006
DQ341076	84682586	Tor83	Ethiopia	L3f2a	L3b\$	L3f2	16,569	Torrioni <i>et al.</i> , 2006
DQ341077	84682600	Tor75	Ethiopia	L3f1b	L3b\$	L3f1b	16,569	Torrioni <i>et al.</i> , 2006

Table D.1 continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
DQ341079	84682628	Tor31	Ethiopia	L3h1b1	L3b\$	L3h1	16,568	Torroni <i>et al.</i> , 2006
DQ341080	84682642	Tor67	Ethiopia	L3h2	L3b	L3h2	16,567	Torroni <i>et al.</i> , 2006
DQ341081	84682656	Tor73	Ethiopia	L3a1	L3b\$	L3a	16,567	Torroni <i>et al.</i> , 2006
AY963585	75905883	Tor65	Uganda	L0f	L0a	L0f	16,569	Macaulay <i>et al.</i> , 2005
D38112 ^b	644480	SB17	Uganda	L0	L0c2	L0a2d	16,559	Horai <i>et al.</i> , 1995
---	---	UG_CGR_71 473	Acholi	---	L3b\$	L3h1	15,478	Isabirye, 2010
---	---	UG_CGR_71 475	Acholi	---	L3c	L3b	15,478	Isabirye, 2010
---	---	UG_CGR_71 477	Acholi	---	L3c	L3b	15,478	Isabirye, 2010
---	---	UG_CGR_71 472	Acholi	---	L3b\$	L4b2	15,478	Isabirye, 2010
---	---	UG_CGR_71 474	Acholi	---	L3b\$	L4a	15,478	Isabirye, 2010
---	---	UG_CGR_71 470	Acholi	---	L2d\$	L2a4	15,478	Isabirye, 2010
---	---	UG_CGR_71 478	Lugbara	---	L2d\$	L2a4	15,478	Isabirye, 2010
---	---	UG_CGR_71 482	Lugbara	---	L2a	L2a1	15,478	Isabirye, 2010
---	---	UG_CGR_71 471	Acholi	---	L2d	L2e	15,478	Isabirye, 2010
---	---	UG_CGR_71 468	Acholi	---	L0c1	L0a1b1a	15,478	Isabirye, 2010
---	---	UG_CGR_71 490	Baganda	---	L3c	L3b	15,478	Isabirye, 2010
---	---	UG_CGR_71 493	Baganda	---	L3c	L3b	15,478	Isabirye, 2010
---	---	UG_CGR_71 486	Baganda	---	L3b\$	L4a	15,478	Isabirye, 2010
---	---	UG_CGR_71 495	Baganda	---	L3a3\$	L3e'l'k'	15,478	Isabirye, 2010
---	---	UG_CGR_71 496	Baganda	---	L3b\$	L4b	15,478	Isabirye, 2010
---	---	UG_CGR_71 487	Lugbara	---	L2a	L2a2'3'	15,478	Isabirye, 2010
---	---	UG_CGR_71 489	Baganda	---	L0c1	L0a1b1a	15,478	Isabirye, 2010
---	---	UG_CGR_71 443	Baganda	---	L0c1	L0a1b1a	15,478	Isabirye, 2010
---	---	UG_CGR_71 492	Baganda	---	L0c1	L0a1a2	15,478	Isabirye, 2010
---	---	UG_CGR_71 494	Baganda	---	L0a	L0f	15,478	Isabirye, 2010
---	---	UG_CGR_71 656	Baganda	---	L3a3\$	L3e'l'k'	15,478	Isabirye, 2010

Table D.1 continued...

GenBank® accession number	GI nr.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
---	---	UG_CGR_71_677	Lugbara	---	L3c	L3b	15,478	Isabirye, 2010
---	---	UG_CGR_71_657	Baganda	---	L3b\$	L4b	15,478	Isabirye, 2010
---	---	UG_CGR_71_660	Baganda	---	L3b\$	L4b2	15,478	Isabirye, 2010
---	---	UG_CGR_71_674	Lugbara	---	L3b\$	L3h1	15,478	Isabirye, 2010
---	---	UG_CGR_71_678	Lugbara	---	L2a	L2a2	15,478	Isabirye, 2010
---	---	UG_CGR_71_675	Lugbara	---	L0a\$	L5c	15,478	Isabirye, 2010
---	---	UG_CGR_71_676	Lugbara	---	L0a\$	L1c3a	15,478	Isabirye, 2010
---	---	UG_CGR_71_655	Baganda	---	L0c2	L0a2a2	15,478	Isabirye, 2010
---	---	UG_CGR_71_673	Baganda	---	L0c2	L0a2	15,478	Isabirye, 2010
---	---	UG_CGR_71_739	Acholi	---	L3a2	L3	15,478	Isabirye, 2010
---	---	UG_CGR_71_699	Lugbara	---	L3b\$	L3f1b	15,478	Isabirye, 2010
---	---	UG_CGR_71_708	Lugbara	---	L0L1\$	L4b2	15,478	Isabirye, 2010
---	---	UG_CGR_71_679	Lugbara	---	L2a	L2a2	15,478	Isabirye, 2010
---	---	UG_CGR_71_738	Acholi	---	L2a	L2a2'3'	15,478	Isabirye, 2010
---	---	UG_CGR_71_734	Acholi	---	L2a	L2a4	15,478	Isabirye, 2010
---	---	UG_CGR_71_680	Lugbara	---	L2d\$	L2a1c	15,478	Isabirye, 2010
---	---	UG_CGR_71_700	Lugbara	---	L1a2	L1b1a	15,478	Isabirye, 2010
---	---	UG_CGR_71_696	Lugbara	---	L0a\$	L5a1	15,478	Isabirye, 2010
---	---	UG_CGR_71_709	Lugbara	---	L0L1\$	L5a	15,478	Isabirye, 2010
SOUTHERN AFRICAN DATASET (DATASET 6)								
EF184590	133854667	sanC5_L0d	San/ South Africa	L0d	L0b	L0d1	16,568	Gonder <i>et al.</i> , 2007
EF184591	133854681	San_54_L0d	San/ South Africa	L0d	L0b	L0d2c	16,568	Gonder <i>et al.</i> , 2007
EF184592	133854695	sanC6_L0d2	San/ South Africa	L0d2	L0b	L0d1c1a	16,566	Gonder <i>et al.</i> , 2007
EF184593	133854709	sanC2_L0d2	San/ South Africa	L0d2	L0b	L0d1c	16,566	Gonder <i>et al.</i> , 2007
EF184594	133854723	San_107_L0d2	San/ South Africa	L0d2	L0b	L0d1c1b	16,571	Gonder <i>et al.</i> , 2007

Table D.1 continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
EF184610	133854946	San_11_L0k	San/ South Africa	L0k	L0a	L0k1	16,564	Gonder <i>et al.</i> , 2007
EF184611	133854959	sanC3_L0k	San/ South Africa	L0k	L0a	L0k1	16,568	Gonder <i>et al.</i> , 2007
EF184633	133855265	sanC1_L3	San/ South Africa	L3	L3b\$	L3\$	16,570	Gonder <i>et al.</i> , 2007
---	---	KS_CGR_32/ SA93-32	!Kung/ South Africa	---	L0b	L0d1c1b	16,567	Mouton, 2003
---	---	KS_CGR_01/ 1800	!Kung/ South Africa	---	L0a	L0k1	16,567	Koekemoer, 2010
---	---	KS_CGR_32/ SA93-32	!Kung/ South Africa	---	L0b	L0d1c1b	16,567	Mouton, 2003
AF347008	13273186	san 1	San/Africa	L0k1	L0a	L0k1	16,569	Ingman <i>et al.</i> , 2000
AF347009	13273200	san 2	San/Africa	L0k1	L0a	L0k1	16,567	Ingman <i>et al.</i> , 2000
DQ112845	70956024	AF18	Khoi-San	L4b2a2	L3b\$	L4b2	15,585	Kivisild <i>et al.</i> , 2006
DQ112899	70956132	AF09	Khoi-San	L0d1c1	L0b	L0d1	15,582	Kivisild <i>et al.</i> , 2006
DQ112900	70956134	AF08	Khoi-San	L2a1f	L2a	L2a1b1	15,585	Kivisild <i>et al.</i> , 2006
---	---	KS_CGR_04/ 1803	!Kung/ Namibia	---	L0b	L0d1c1a	16,566	Koekemoer, 2010
---	---	KS_CGR_05/ 1804	!Kung/ Namibia	---	L0b	L0d1c	16,566	Koekemoer, 2010
---	---	KS_CGR_38/ 9338	!Kung/ Namibia	---	L0a	L0k1	16,568	Mouton, 2003
---	---	KS_CGR_92/ 1891	!Kung/ Namibia	---	L0b	L0d1c1b	16,571	Koekemoer, 2010
---	---	KS_CGR127/ 1926	!Kung/ Namibia	---	L0b	L0d1a	16,568	Koekemoer, 2010
---	---	KS_CGR164/ 1963	!Kung/ Namibia	---	L2b	L2b	16,569	Koekemoer, 2010
---	---	KS_CGR143/ 1942	!Kung/Namibia	---	L3a1	L3e	16,569	Koekemoer, 2010
---	---	KS_CGR175/ 1974	!Kung/Namibia	---	L3a1	L3e	16,568	Koekemoer, 2010
---	---	KS_CGR_10/ SA93-10	!Kung/Namibia	---	L0b	L0d1c1b	16,567	Mouton, 2003
---	---	KS_CGR_48/ 1847	!Kung/Angola	---	L0b	L0d1b	16,567	Koekemoer, 2010
---	---	KS_CGR_56/ 1855	!Kung/Angola	---	L0b	L0d1b	16,568	Koekemoer, 2010
---	---	KS_CGR_59/ 1858	!Kung/Angola	---	L0a	L0k1	16,570	Koekemoer, 2010
---	---	KS_CGR_60/ 1859	!Kung/Angola	---	L0b	L0d1b	16,568	Koekemoer, 2010

Table D.1 continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
---	---	KS_CGR_61/1860	!Kung/Angola	---	L0b	L0d1a	16,568	Koekemoer, 2010
---	---	KS_CGR_69/1868	!Kung/Angola	---	L2b	L2b	16,568	Koekemoer, 2010
---	---	KS_CGR_77/1876	!Kung/Angola	---	L0b	L0d1c1a	16,566	Koekemoer, 2010
---	---	KS_CGR_83/1882	!Kung/Angola	---	L0a	L0k1	16,567	Koekemoer, 2010
---	---	KS_CGR_84/1883	!Kung/Angola	---	L0a	L0k1	16,569	Koekemoer, 2010
---	---	KS_CGR_90/1889	!Kung/Angola	---	L3b	L3d	16,568	Koekemoer, 2010
---	---	KS_CGR_91/1890	!Kung/Angola	---	L0b	L0d1c1b	16,567	Koekemoer, 2010
---	---	KS_CGR105/1904	!Kung/Angola	---	L0b	L0d1c1	16,566	Koekemoer, 2010
---	---	KS_CGR111/1910	!Kung/Angola	---	L0b	L0d1c1b	16,566	Koekemoer, 2010
---	---	KS_CGR117/1916	!Kung/Angola	---	L0b	L0d1c1b	16,567	Koekemoer, 2010
---	---	KS_CGR_20/1919	!Kung/Angola	---	L0a	L0k1	16,568	Koekemoer, 2010
---	---	KS_CGR_121/1920	!Kung/Angola	---	L0b	L0d1c1a	16,566	Koekemoer, 2010
---	---	KS_CGR140/1939	!Kung/Angola	---	L3a1	L3e	16,569	Koekemoer, 2010
---	---	KS_CGR157/1956	!Kung/Angola	---	L0a	L0k1	16,567	Koekemoer, 2010
---	---	KS_CGR172/1971	!Kung/Angola	---	L3b	L3d	16,568	Koekemoer, 2010
---	---	KS_CGR173/1972	!Kung/Angola	---	L2b	L2b	16,568	Koekemoer, 2010
---	---	KS_CGR176/1975	!Kung/Angola	---	L0a	L0k1	16,568	Koekemoer, 2010
---	---	KS_CGR_44/1843	!Kung/Angola	---	L0b	L0d2b	16,569	Koekemoer, 2010
---	---	KS_CGR_40/SA93-40	!Kung/Angola	---	L0b	L0d1b	16,569	Mouton, 2003
---	---	KS_CGR_52/SA93-52	!Kung/Angola	---	L0b	L0d1	16,569	Mouton, 2003
---	---	KS_CGR_72/SA93-72	!Kung/Angola	---	L0b	L0d1c1b	16,567	Mouton, 2003
---	---	KS_CGR_80/SA93-80	!Kung/Angola	---	L0a	L0k1	16,568	Mouton, 2003
---	---	KS_CGR_82/SA93-82	!Kung/Angola	---	L0b	L0d1c1b	16,567	Mouton, 2003
---	---	KS_CGR_94/SA93-94	!Kung/Angola	---	L0b	L0d1a	16,569	Mouton, 2003
---	---	KS_CGR102/SA93-102	!Kung/Angola	---	L0b	L0d1c1a	16,567	Mouton, 2003

Table D.1 continued...

GenBank® accession number	GI no.	Sequence name/ isolate	Ethnicity/ Geographic origin	Haplogroup/sub-haplogroup classification			No. of bp	Reference
				Published ^a	Wallace (2004) ^b	Phylo Tree (2009) ^c		
---	---	KS_CGR106/SA93-106	!Kung/Angola	---	L0a	L0k1	16,568	Mouton, 2003
---	---	KS_CGR122/SA93-122	!Kung/Angola	---	L0b	L0d1c1b	16,567	Mouton, 2003
---	---	KS_CGR130/SA93-130	!Kung/Angola	---	L0b	L0d1a	16,569	Mouton, 2003
DQ112830	70955994	AF54	Zulu/Africa	L0d2c	L0b	L0d2c	15,582	Kivisild <i>et al.</i> , 2006
DQ112854	70956042	AF25	Zulu/Africa	L0d1a	L0b	L0d1a1	15,584	Kivisild <i>et al.</i> , 2006
DQ112848	70956030	AF20	Sotho/Africa	L0a2a2	L0c2	L0a2a2	15,574	Kivisild <i>et al.</i> , 2006
DQ112849	70956032	AF21	Pedi/Africa	L2a1f	L2a	L2a1b1	15,585	Kivisild <i>et al.</i> , 2006
DQ112850	70956034	AF22	Tswana/ Africa	L0d2a	L0b	L0d2a	15,584	Kivisild <i>et al.</i> , 2006
DQ112855	70956044	AF27	Tswana/ Africa	L0d1b	L0b	L0d1	15,583	Kivisild <i>et al.</i> , 2006
DQ112847	70956028	AF19	Herero/ Africa	L3d3a	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112853	70956040	AF26	Herero/ Africa	L3d3a	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006
DQ112857	70956048	AF28	Herero/ Africa	L3d3a	L3b	L3d	15,583	Kivisild <i>et al.</i> , 2006

GenBank® accession number = a unique identifier for DNA sequences submitted to the GenBank® database to which information about the DNA sequence is connected; GI number = GenInfo Identifier number that is used to specify a specific DNA sequence; Sequence name/ isolate = the sample name provided with the mitochondrial sequence under investigation; Ethnicity/ geographic origin = the place of origin or the ethnicity of the individual to whom the mtDNA sequence belongs, the ethnicity of the individuals contained in this dataset is discussed in detail in Section 5.11.5, in which the ethnic groups listed in this dataset are connected to the country of origin and region within which the country resides; the mtDNA sequence isolates with the prefix "KS" belongs to the Khoi-San-speaking populations of southern Africa, the term "Khoi-San" here includes all the different names for the Khoi-San speakers of southern Africa, such as !Kung, as discussed in Section 5.11.5; the mtDNA isolates with a prefix "UG" belong to individuals of Ugandan origin; haplogroup classification was performed by using published haplogroup assignments and two haplogroup classification schemes, a = published in Pereira *et al.*, 2009, b = Wallace classification system (2004) as discussed in Section 5.12, c = PhyloTree classification system (Van Oven and Kayser, 2009) as discussed in Section 5.12; \$ = to indicate that the mitochondrial sequence could not be fully resolved by the haplogroup classification scheme used; NC_001807 = a NCBI mitochondrial reference sequence that belongs to a western African individual of Yoruban ethnicity; Zaire here refers to the current Democratic Republic of Congo (CIA, World Information); Bakola, Ewondo = ethnic groups that reside in Cameroon; Effik, Ibo, Hasau, Yoruba = ethnic groups that reside in Nigeria; Mossi, Rimaibe, Foulbe = ethnic groups that reside in Burkina Faso and Pygmy = ethnic groups that reside in Zaire/ Democratic Republic of the Congo; Nuba = ethnic group that resides in Sudan; Berta = ethnic group that resides in Ethiopia; Acholi, Lugbara, Baganda = ethnic groups that reside in Uganda; San, !Kung, Khoi-San = Khoi-San speaking populations that reside in southern Africa; Herero = Bantu-speaking ethnic group that resides in Angola, Namibia and Botswana; Zulu, Sotho, Pedi, Tswana = ethnic groups that reside in South Africa; no. = number; bp. = base pairs.

APPENDIX E

Global African and All African phylogenetic trees of this investigation

This appendix contains the phylogenetic trees that were constructed by using the Global African and All African datasets, as described in Section 5.11 and Section 6.8. The mitochondrial sequences contained in these datasets represent a broad collection of coding region mtDNA sequences belonging to individuals of African origin. Distinctions were made between the individuals residing in African countries only, as represented in the All African dataset, and those residing both in African and non-African countries, as represented in the Global African dataset. The purpose of the phylogenetic trees was to position the maternal lineages of the mtDNA sequences of the Tswana cohort under investigation in the context of the maternal lineages of a broad set of African individuals in an attempt to discover the evolutionary past of the Tswana-speaking individuals of this investigation.

The phylogenetic trees were constructed by using the neighbour-joining (NJ) and maximum parsimony (MP) methods for tree-building, as described in Section 5.13. The NJ outtrees were generated by using PHYLIP 3.6 and were converted to a phylogram format in TreeView (Page, 1996). It was rooted by using an outgroup, the *Pan troglodytes* sequence. Thereafter it was viewed by using MEGA version 5 (Tamura *et al.*, 2007) in a circular format. The PHYLIP outtree format converted the bootstrap values into branch lengths. The MP trees were constructed by using MEGA version 5 (Tamura *et al.*, 2007) and viewed in MEGA Tree Explorer in a circular format rooted at the outgroup sequence *Pan troglodytes* with the bootstrap values indicated on the tree branches. The phylogenetic trees are presented in an A3 format and also in digital format on CD_Appendix E (attached to the last page of the thesis) for ease of reference when using it as a guide for Section 6.8.

Figure E.1 Global African and All African phylogenetic trees

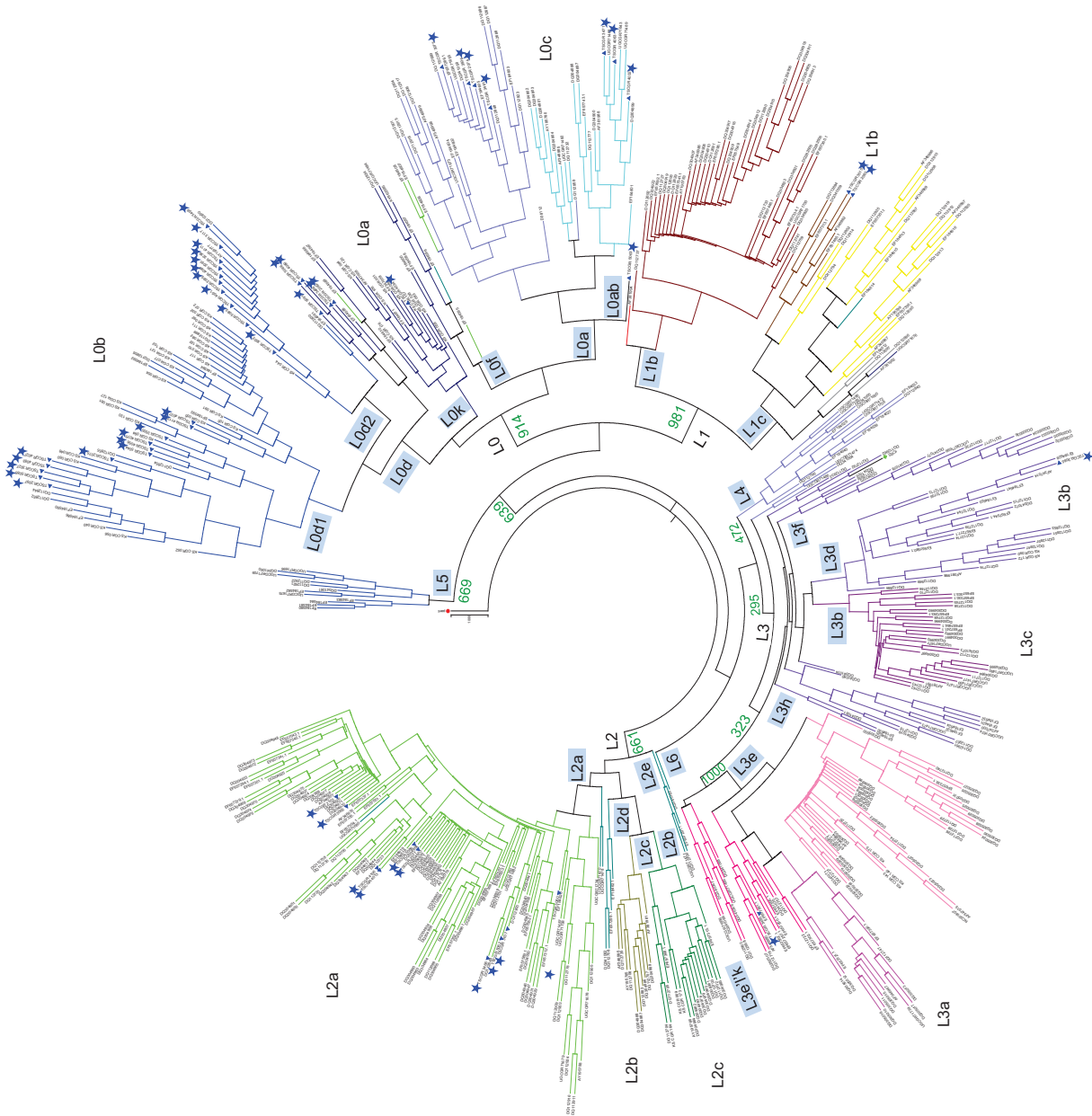
- A. Global African NJ tree
- B. Global African MP tree
- C. All African NJ tree
- D. All African MP tree

The phylogenetic trees represent the coding regions of 573 mtDNA sequences of the Global African dataset and 386 mtDNA sequences of the All African dataset, as described in Section 5.11.1 and Section 5.11.2. The rCRS is indicated by a green diamond (◆) and the *Pan troglodytes* outgroup is represented by a red circle (●). The haplogroups and sub-haplogroups assigned by the Wallace classification system (2004) are presented in colours as described in the tree legend below. Major haplogroup branching is indicated at the branch splits on the tree and sub-haplogroup groupings are indicated on the outside of the tree. The PhyloTree (Van Oven and Kayser, 2009) haplogroup assignments are indicated in blue text boxes. MtDNA sequence identification is presented at the tips of the branches and the Tswana mtDNA sequences of this investigation are indicated by a blue triangle (▲) and blue star (★). The bootstrap values are indicated in green on the branches. The bootstrap values of the NJ trees are indicated as the number of repeats per 1,000 iterations and for the MP trees as a percentage value (See Section 6.8).

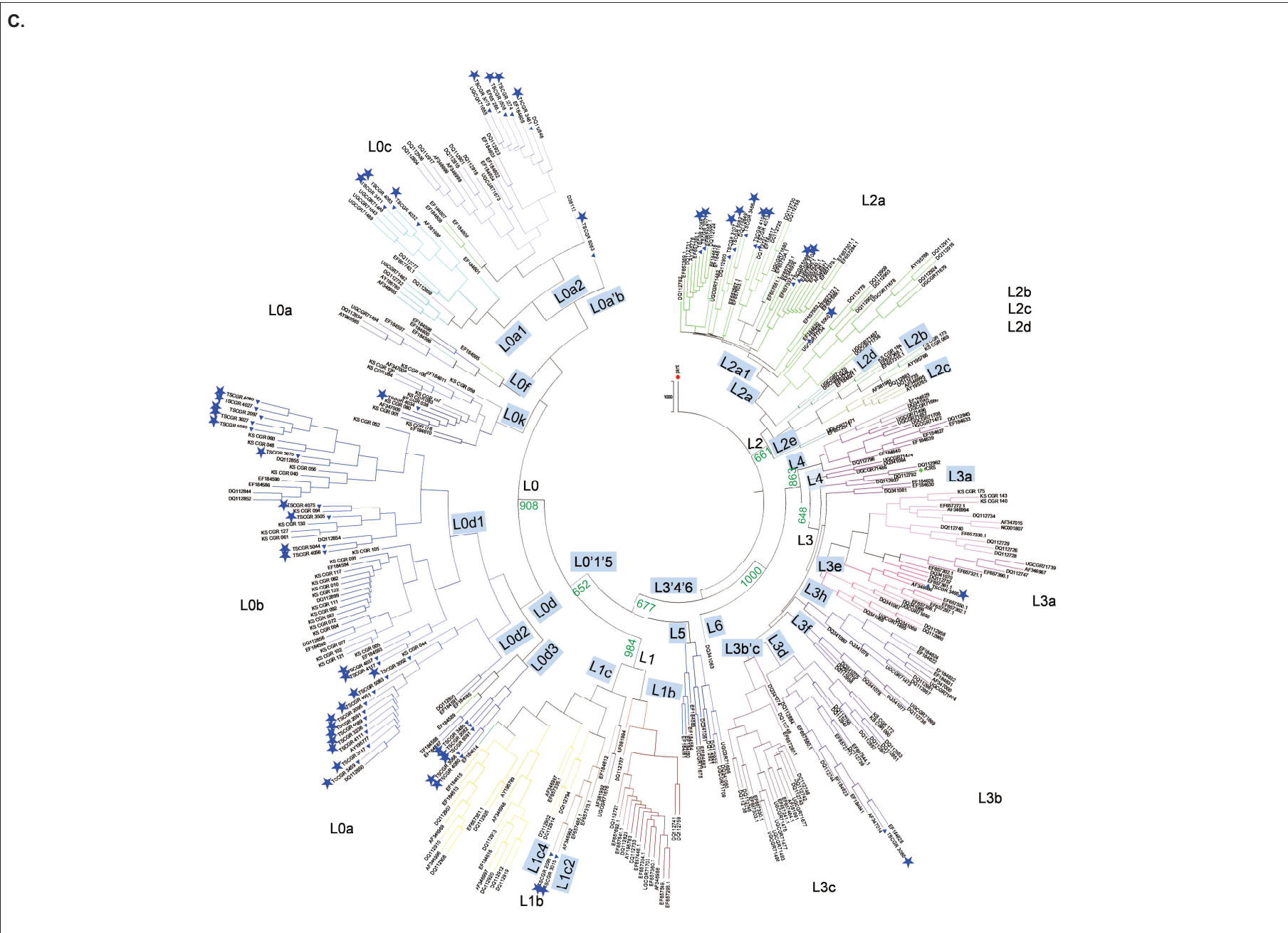
Tree legend

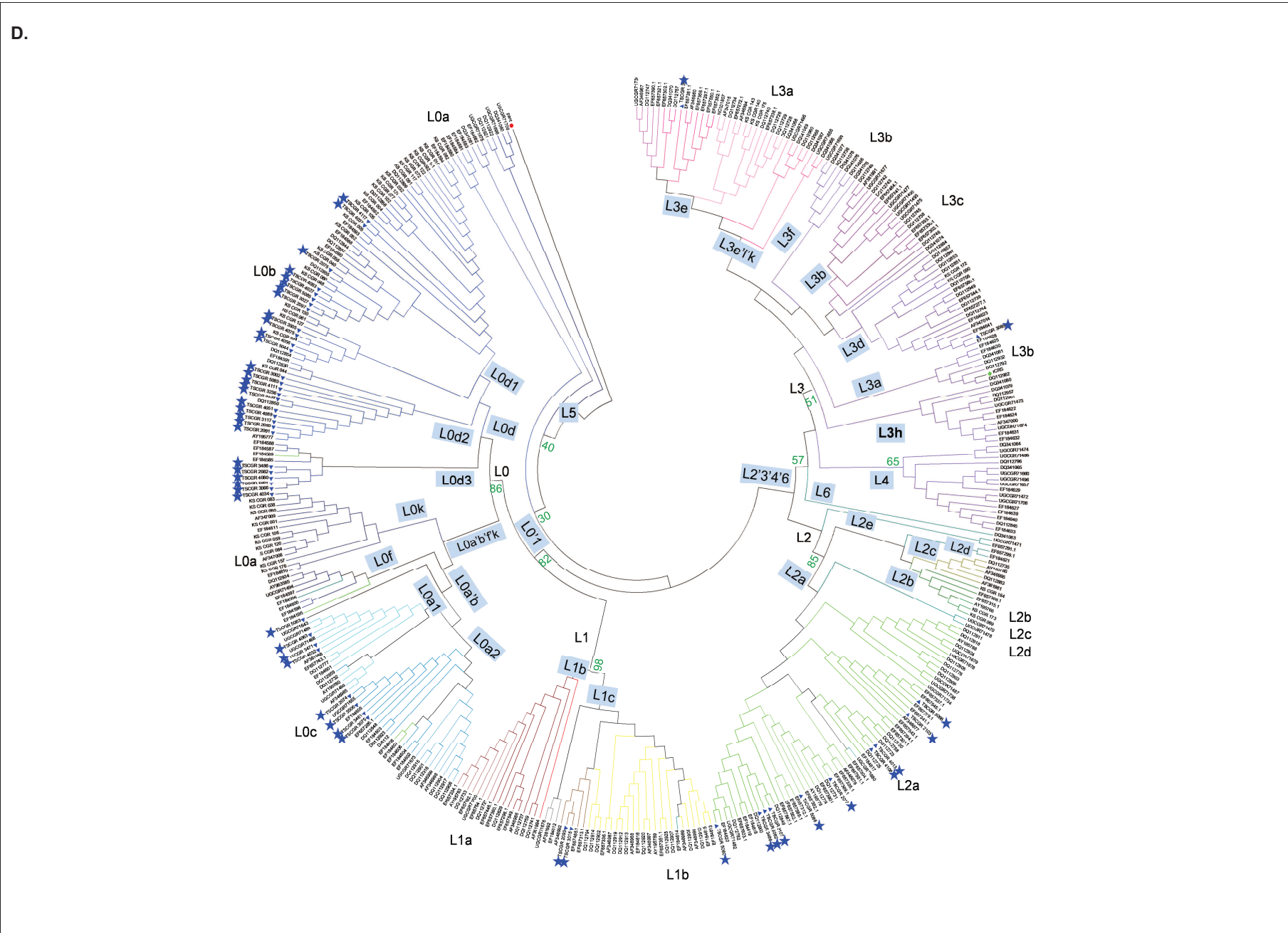
L0L1 L0a L0b L0c L0c1 L0c2	L1a L1a1 L1a2 L1a3 L1b L1b1 L1b2	L2a L2b L2c L2d	L3a L3a1 L3a2 L3a3 L3b L3c
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A.



[illegible]





APPENDIX F

Phylogenetic trees of the Tswana-speaking individuals of this investigation

This appendix contains the phylogenetic trees that were constructed by using the Tswana dataset (3b) as described in Section 5.11.3, Section 6.85 and Section 6.8.6. The phylogenetic trees were constructed by using the neighbour-joining (NJ) and maximum parsimony (MP) methods for tree building, as described in Section 5.13. The NJ outtrees were generated by using PHYLIP 3.6 and were converted to a phylogram format in TreeView (Page, 1996). It was rooted by using an outgroup, the *Pan troglodytes* sequence. Thereafter it was viewed by using MEGA version 5 (Tamura *et al.*, 2007) in a circular format. The PHYLIP outtree format converted the bootstrap values into branch lengths. The MP trees were constructed by using MEGA version 5 (Tamura *et al.*, 2007) and viewed in MEGA Tree Explorer in a circular format rooted at the outgroup sequence *Pan troglodytes* with the bootstrap values indicated on the tree branches. The phylogenetic trees are presented in an A3 format and also in digital format on CD_Appendix F (attached to the last page of the thesis) for ease of reference when using it as a guide for Section 6.8.

Figure F.1 Phylogenetic trees of Tswana-speaking individuals of this investigation

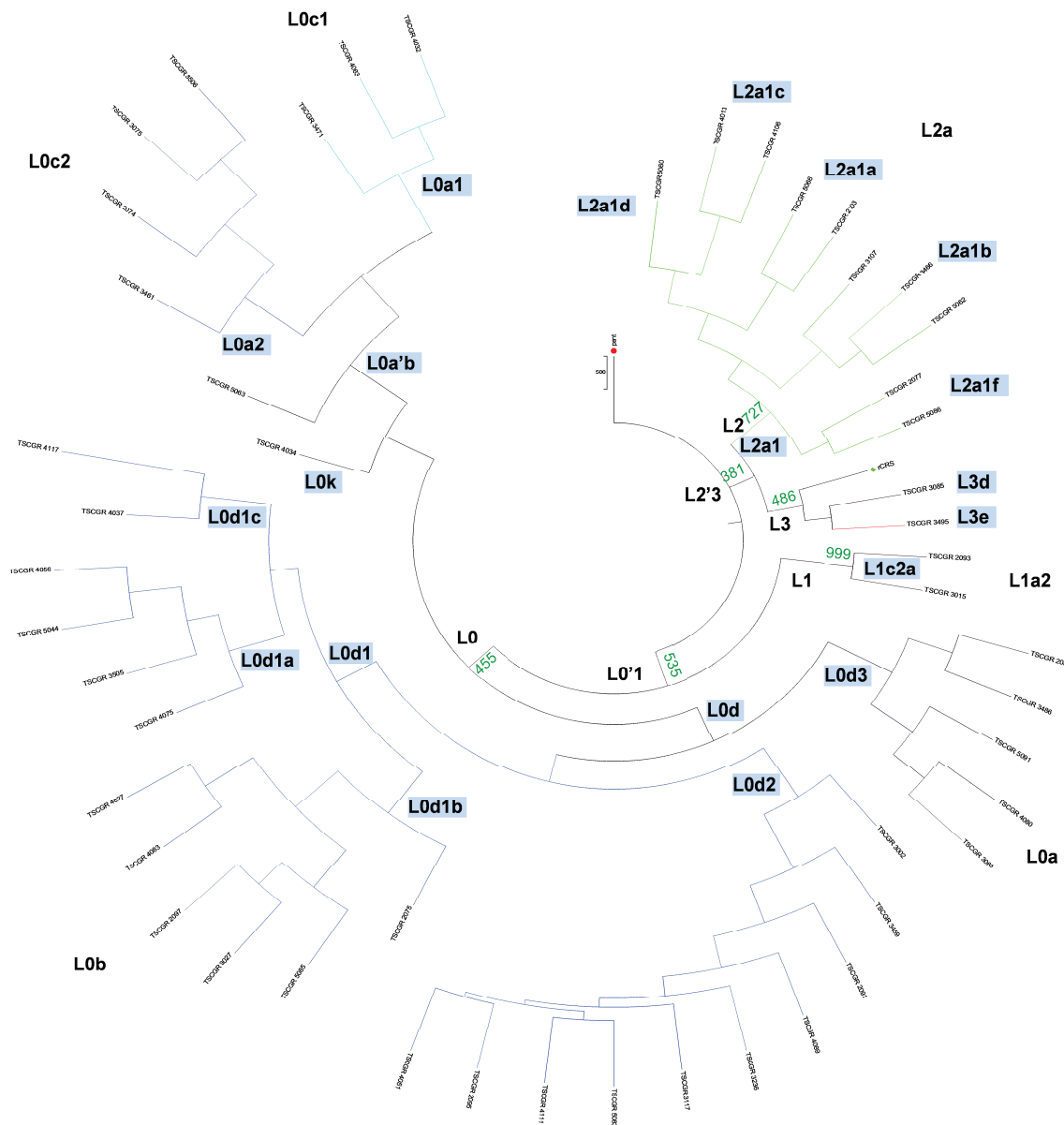
- A. Tswana NJ tree
- B. Tswana MP tree

The phylogenetic trees represent the coding regions of 50 mtDNA sequences of the Tswana dataset as described in Section 5.11.3. The rCRS is indicated by a green diamond (◆) and the *Pan troglodytes* outgroup is represented by a red circle (●). The haplogroups and sub-haplogroups assigned by the Wallace classification system (2004) are presented in colours as described in the tree legend below. Major haplogroup branching is indicated at the branch splits on the tree and sub-haplogroup groupings are indicated on the outside of the tree. The PhyloTree (Van Oven and Kayser, 2009) haplogroup assignments are indicated in blue text boxes. MtDNA sequence identification is presented at the tips of the branches. The bootstrap values are indicated in green on the branches. The bootstrap values of the NJ trees are indicated as the number of repeats per 1,000 iterations and for the MP trees as a percentage value (See Section 6.8).

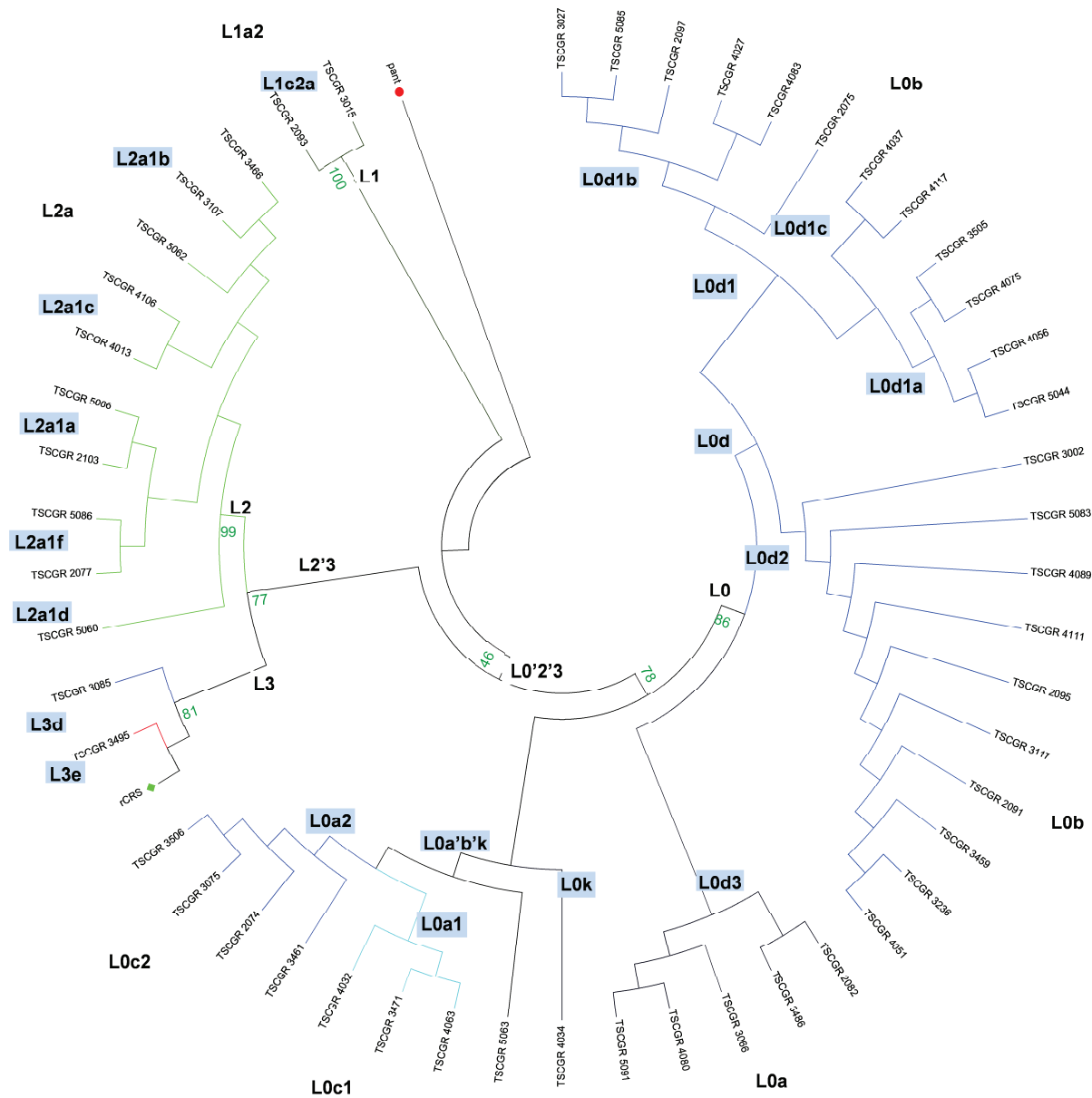
Tree legend

L0L1 L0a L0b L0c L0c1 L0c2	L1a L1a1 L1a2 L1a3 L1b L1b1 L1b2	L2a L2b L2c L2d	L3a L3a1 L3a2 L3a3 L3b L3c
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A.



B.



APPENDIX G

Mitochondrial consensus sequence for a Tswana-speaking population of South Africa

The Tswana mtDNA consensus sequence is presented in this appendix. It was constructed from the full mitochondrial genomes of the 50 Tswana-speaking individuals of this investigation by using BioEdit version 7.0.5.2 (Hall, 2001). The sequence variants that were present in the majority of the Tswana-speaking individuals of this investigation were included in the consensus sequence. In cases where two sequence variants were distributed in equal quantities across the Tswana samples of this investigation, the sequence variants were indicated as ambivalent (R, Y, S or M) by the BioEdit version 7.0.5.2 (Hall, 2001) software. This ensured that both sequence variants were acknowledged as contributing to the total sequence variance of the Tswana consensus sequence. The rCRS (Andrews *et al.*, 1999) was used to determine the positions of the sequence variants.

Figure G.1 Mitochondrial consensus sequence for a Tswana-speaking population of South Africa

1	GATCACAGGT	CTATCACCCCT	ATTAACCACT	CACGGGAGCT	CTCCATGCAT	TTGGTATTTT
61	CGTCTGGGGG	GTGTGCACGC	GATAGCATTG	CGAGACGCTG	GAGCCGGAGC	ACCCTATGTC
121	GCAGTATCTG	TCTTTGATTG	CTGCCCATC	CCATTATTTA	TCGCACCTAC	GTTCAATATT
181	ACAGGCGAAC	ATACCTACTA	AAGTGTGTTA	ATTAATTAAT	GCTTGTAGGA	CATAATAATA
241	ACAATTAAT	GTCTGCACAG	CCACTTTCCA	CACAGACATC	ATAACAAAAA	ATTTCCACCA
301	AACCCCCCT	CCCCCGCTT	CTGGCCACAG	CACTTAAACA	CATCTCTGCC	AAACCCCAAA
361	AACAAAGAAC	CCTAACACCA	GCCTAACCA	ATTTCAAATT	TTATCTTTTG	GCGGTATGCA
421	CTTTTAACAG	TCACCCCCCA	ACTAACACAT	TATTTTCCCC	TCCCCTCCC	ATACTACTAA
481	TCTCATCAAT	ACAACCCCCG	CCCATCCTAC	CCAGCACACA	CACACCGCTG	CTAACCCCAT
541	ACCCCGAACC	AACCAAACCC	CAAAGACACC	CCCCACAGTT	TATGTAGCTT	ACCTCCTCAA
601	AGCAATACAC	TGAAAATGTT	TAGACGGGCT	CACATCACCC	CATAAACAAA	TAGGTTTGGT
661	CCTAGCCTTT	CTATTAGCTC	TTAGTAAGAT	TACACATGCA	AGCATCCCCG	TTCCAGTGAG
721	TTCAACCCTCT	AAATCACCAC	GATCAAAAGG	GACAAGCATC	AAGCACGCA	CAATGCAGCT
781	CAAAACGCTT	AGCCTAGCCA	CACCCCCACG	GGAAACAGCA	GTGATAAACC	TTTAGCAATA
841	AACGAAAGTT	TAACCTAAGCT	ATACTAACCC	CAGGGTTGGT	CAATTTCTGTG	CCAGCCACCG
901	CGGTACACAG	ATTAACCCAA	GTCAATAGAA	GCCGGCGTAA	AGAGTGTTTT	AGATCACCCC
961	CTCCCCAATA	AAGCTAAAC	TCACCTGAGT	TGTAAAAAAC	TCCAGTTGAC	ACAAAATAAA
1021	CTACGAAAGT	GGCTTTAACA	TATCTGAATA	CACAATAGCT	AAGACCCAAA	CTGGGATTAG
1081	ATACCCCACT	ATGCTTAGCC	CTAAACCTCA	ACAGTTAAAT	CAACAAACT	GCTCGCCAGA
1141	ACACTACGAG	CCACAGCTTA	AAACTCAAAG	GACCTGGCGG	TGCTTCATAT	CCCTCTAGAG
1201	GAGCCTGTTT	TGTAATCGAT	AAACCCCGAT	CAACCTCACC	ACCTCTTGCT	CAGCCTATAT
1261	ACCGCCATCT	TCAGCAAACC	CTGATGAAGG	CTACAAAGTA	AGCGCAAGTA	CCCACGTAAA
1321	GACGTTAGGT	CAAGGTGTAG	CCCATGAGGT	GGCAAGAAAT	GGGCTACATT	TTCTACCCCA
1381	GAAACTACG	ATAGCCCTTA	TGAACTTAA	GGGTCAAGG	TGGATTAGC	AGTAACTRA

1441	GAGTAGAGTG	CTTAGTTGAA	CAGGGCCCTG	AAGCGCGTAC	ACACCGCCCG	TCACCCTCCT
1501	CAAGTATACT	TCAAAGGACA	TTTAACTAAA	ACCCCTACGC	ATTTATATAG	AGGAGACAAG
1561	TCGTAACATG	GTAAGTGTAC	TGGAAAGTGC	ACTTGGACGA	ACCAGAGTGT	AGCTTAACAC
1621	AAAGCACCCA	ACTTACACTT	AGGAGATTTT	AACTTAACTT	GACCGCTCTG	AGCTAAACCT
1681	AGCCCCAAAC	CCACTCCACC	TTACTACCAG	ACAACCTTAG	CCAAACCATT	TACCCAAATA
1741	AAGTATAGGC	GATAGAAATT	GAAACCTGGC	GCAATAGATA	TAGTACCGCA	AGGGAAAGAT
1801	GAAAAATTAT	AACCAAGCAT	AATATAGCAA	GGACTAACCC	CTATACCTTC	TGCATAATGA
1861	ATTAAC TAGA	AATAACTTTG	CAAGGAGAGC	CAAAGCTAAG	ACCCCCGAAA	CCAGACGAGC
1921	TACCTAAGAA	CAGCTAAAAG	AGCACACCCG	TCTATGTAGC	AAAATAGTGG	GAAGATTTAT
1981	AGGTAGAGGC	GACAAACCTA	CCGAGCCTGG	TGATAGCTGG	TTGTCCAAGA	TAGAATCTTA
2041	GTTCAACTTT	AAATTTGCCC	ACAGAACCCT	CTAAATCCCC	TTGTAAATTT	AACTGTTAGT
2101	CCAAAGAGGA	ACAGCTCTTT	GGACACTAGG	AAAAAACCTT	GTAGAGAGAG	TAAAAAATTT
2161	AACACCCATA	GTAGGCCTAA	AAGCAGCCAC	CAATTAAGAA	AGCGTTCAAG	CTCAACACCC
2221	ACTACCTAAA	AAATCCCAAA	CATATAACTG	AACTCCTCAC	ACCCAATTGG	ACCAATCTAT
2281	CACCCTATAG	AAGAACTAAT	GTTAGTATAA	GTAACATGAA	AACATTCTCC	TCCGCATAAG
2341	CCTGCGTCAG	ATTAAAACAC	TGAACTGACA	ATTAACAGCC	CAATATCTAC	AATCAACCAA
2401	CAAGTCATTA	TTACCCTCAC	TGTCAACCCA	ACACAGGCAT	GCTCATAAGG	AAAGGTTAAA
2461	AAAAGTAAAA	GGAACTCGGC	AAATCTTACC	CCGCCTGTTT	ACCAAAAAACA	TCACCTCTAG
2521	CATCACCAGT	ATTAGAGGCA	CCGCCTGCCC	AGTGACACAT	GTTTAACGGC	CGCGGTACCC
2581	TAACCGTGCA	AAGGTAGCAT	AATCACTTGT	TCCTTAAATA	GGGACCTGTA	TGAATGGCTC
2641	CACGAGGGTT	CAGCTGTCTC	TTACTTTTAA	CCAGTGAAAT	TGACCTGCCC	GTGAAGAGGC
2701	GGGCATGACA	CAGCAAGACG	AGAAGACCTT	ATGGAGCTTT	AATTTATTAA	TGCAACAAT
2761	ACCTAACAAA	CCCACAGGTC	CTAAACTACC	AAACCTGCAT	TAAAAATTTT	GGTTGGGGCG
2821	ACCTCGGAGC	AGAACCCAAC	CTCCGAGCAG	TACATGCTAA	GACTTCACCA	GTCAAAGCGA
2881	ACTACCATAC	TCAATTGATC	CAATAACTTG	ACCAACGGAA	CAAGTTACCC	TAGGGATAAC
2941	AGCGCAATCC	TATTCTAGAG	TCCATATCAA	CAATAGGGTT	TACGACCTCG	ATGTTGGATC
3001	AGGACATCCC	GATGGTGCAG	CCGCTATTAA	AGGTTTCGTT	GTTCAACGAT	TAAAGTCCTA
3061	CGTGATCTGA	GTTCAGACCG	GAGTAATCCA	GGTCGGTTTC	TATCTACTTC	AAATTCCTCC
3121	CTGTACGAAA	GGACAAGAGA	AATAAGGCCT	ACTTCACAAA	GCGCCTTCCC	CCGTAAATGA
3181	TATCATCTCA	ACTTAGTATT	ATACCCACAC	CCACCCAAGA	ACAGGGTTTG	TTAAGATGGC
3241	AGAGCCCGGT	AATCGCATAA	AACTTAAAC	TTTACAGTCA	GAGGTTCAAT	TCCTCTTCTT
3301	AACAACATAC	CCATGGCCAA	CCTCCTACTC	CTCATTTGTAC	CCATTCTAAT	CGCAATGGCA
3361	TTCTTAATGC	TTACCGAACG	AAAAATTTCTA	GGCTATATAC	AACTACGCAA	AGGCCCAAC
3421	GTTGTAGGCC	CCTACGGGCT	ACTACAACCC	TTCGCTGACG	CCATAAAACT	CTTCACCAAA
3481	GAGCCCCATA	AACCCGCCAC	ATCTACCATC	ACCCTATACA	TCACCGCCCC	GACCTTAGCT
3541	CTCACCATCG	CTCTTCTACT	ATGAACCCCC	CTCCCCATAC	CCAACCCCTT	GGTTAAACCTC
3601	AACCTAGGCC	TCCTATTTAT	TCTAGCCACC	TCTAGCCTAG	CCGTTTACTC	AATCCTCTGA
3661	TCAGGGTGAG	CATCAAACCT	AAACTACGCC	CTGATCGGCG	CACTGCGAGC	AGTAGCCCAA
3721	ACAATCTCAT	ATGAAGTCAC	CCTAGCCATC	ATTCTACTAT	CAACATTACT	AATAAGTGGC
3781	TCCTTTAACC	TCTCCACCCT	TATCACAACA	CAAGAACACC	TCTGATTACT	CCTGCCATCA
3841	TGACCCCTTG	CCATAATATG	ATTATATCTC	ACACTAGCAG	AGACCAACCG	AACCCCTTTC
3901	GACCTTGCCG	AAGGGGAGTC	CGAACTAGTC	TCAGGCTTCA	ACATCGAATA	CGCCGAGGC
3961	CCCTTCGCCC	TATTCTTCAT	AGCCGAATAC	ACAAACATTA	TTATAATAAA	CACCTCACCC
4021	ACTACAATCT	TCCTAGGAAC	AACATATGAC	GCACTCTCCC	CTGAACTCTA	CACAACATAT
4081	TTTGTACCCA	AGACCCTACT	TCTGACCTCC	CTGTTCTTAT	GAATTGGAAC	AGCATACCCC
4141	CGATTCCGCT	ACGACCAACT	CATACACCTC	CTATGAAAAA	ACTTCCTACC	ACTCACCTTA
4201	GCATTACTTA	TATGATATGT	CTCCATACCC	ATACAACTCT	CCAGCATTCC	CCCTCAAACC
4261	TAAGAAATAT	GTCTGATAAA	AGAGTTACTT	TGATAGAGTA	AATAATAGGA	GTTTAAACCC
4321	CCTTATTTCT	AGGACTATGA	GAATCGAACC	CATCCCTGAG	AATCCAAAAT	TCTCCGTGCC
4381	ACCTATCACA	CCCCATCCTA	AAGTAAGGTC	AGCTAAATAA	GCTATCGGGC	CCATACCCCG
4441	AAAATGTTGG	TTATACCCTT	CCCGTACTAA	TTAATCCCCT	GGCCCAACCC	GTCATCTACT
4501	CTACCATCTT	TGCAGGCACA	CTCATCACAG	CGCTAAGCTC	GCACTGATTT	TTTACCTGAG
4561	TAGGCTAGTA	AATAAACATG	CTAGCTTTTA	TTCCAGTTCT	AACCAAAAAA	ATAAACCTTC
4621	GTTCCACAGA	AGCTGCCATC	AAGTATTTCC	TCACGCAAGC	AACCGCATCC	ATAATCCTTC
4681	TAATAGCTAT	CCTCTTCAAC	AATATACTCT	CCGGACAATG	AACCATAACC	AATACTACCA
4741	ATCAATACTC	ATCATTAATA	ATCATAATGG	CTATAGCAAT	AAAAC TAGGA	ATAGCCCCCT

4801	TTC	ACTTCTG	AGT	CCCAGAG	GTT	ACCCAAG	GC	CCCCCTCT	GAC	ATCCGGC	CTG	CTTCTTC
4861	TC	ATGACA	AAA	ACTAGCC	CCC	ATCTCAA	TC	ATATACCA	AAT	CTCTCCC	TC	ACTAAACG
4921	TA	AGCCTTCT	CCT	CACTCTC	TCA	ATCTTAT	CC	ATCATAGC	AGG	CAGTTGA	GGT	TGGATTAA
4981	AC	CAAACCCA	GCT	ACGCAA	AT	CTTAGCAT	ACT	CCTCAAT	TAC	CCACATA	GG	ATGAATAA
5041	TAG	CAGTTCT	AC	CGTACAAC	CCT	AACATAA	CC	ATTCTTAA	TT	TAACTATT	TAT	ATTATATCC
5101	TA	ACTACTAC	CG	CATTCCTA	CT	ACTCAACT	TAA	ACTCCAG	CAC	CACGACC	CT	ACTACTAT
5161	CT	CGACCTG	AA	ACAAGCTA	AC	ATGACTAA	CAC	CCTTAAT	TCC	ATCCACC	CT	CCTCTCCC
5221	TAG	GAGGCCT	G	CCCCGCTA	ACC	GGCTTTT	TG	CCCAAATG	GG	CATTATC	GA	AGAATTCA
5281	CA	AAAAACAA	TAG	CCTCATC	AT	CCCCACCA	TC	ATAGCCAC	CAT	CACCTC	CT	TAACTCT
5341	ACT	TCTACCT	AC	GCCTAATC	TAC	TCCACCT	CA	ATCACACT	ACT	CCCCATA	TCT	AACAACG
5401	TAAA	AATAAA	AT	GACAGTTT	GA	ACATACAA	AA	CCCAACCC	ACT	CTCCCC	AC	ACTCATCG
5461	CC	TTACCAC	GCT	ACTCCTA	CCT	ATCTCCC	CT	TTTATACT	AA	TATCTTA	TAG	AAATTTA
5521	GG	TAAATAC	AG	ACCAAGAG	CCT	TCAAAGC	CCT	CAGTAAG	TT	GCAATACT	TA	ATTTCTGT
5581	AA	CAGCTAAG	GAC	TGCAAAA	CCC	CACTCTG	CAT	CAACTGA	AC	GCAAATCA	GC	CACTTTAA
5641	TTA	AGCTAAG	CC	TTACTAG	AC	CAATGGGA	CT	TAAACCCA	CAA	ACACTTA	GT	TAAACAGCT
5701	AAG	CACCCTA	AT	CAACTGGC	TT	CAATCTAC	TT	CTCCCGCC	GCC	GGGAAAA	AA	GGCGGGAG
5761	AAG	CCCCGGC	AG	GTTTGAAG	CT	GCTTCTTC	GA	ATTTGCAA	TT	CAATATGA	AA	ATCACCTC
5821	GG	AGCTGGTA	AAA	AGAGGCC	TA	ACCCCTGT	CT	TTAGATTT	AC	AGTCCAAT	GCT	TCACTCA
5881	GCC	ATTTTAC	CT	CACCCCA	CT	GATGTTTCG	CC	GACCGTTG	ACT	TATCTCT	ACA	AACCACA
5941	AAG	ACATTGG	AAC	ACTATAC	CT	ATTATTCG	GCG	CATGAGC	TGG	AGTCCCTA	GG	CACAGCTC
6001	TA	AGCCTCCT	TAT	TCGAGCC	GAG	CTGGGCC	AG	CCAGGCAA	CCT	TCTAGGT	AAC	GACCACA
6061	TCT	ACAACGT	TAT	CGTCACA	GCC	CATGCAT	TT	GTAATAAT	CT	TCTCATA	GT	AATACCCA
6121	TC	ATAATCGG	AGG	CTTGGC	AA	CTGACTAG	TT	CCCTAAT	AA	TCGGTGCC	CCC	GATATGG
6181	CG	TTCCCCG	CAT	AAACAAC	ATA	AGCTTCT	GAC	TCTTACC	TCC	CTCTCTC	CT	ACTCCTGC
6241	TC	GATCTGC	TAT	AGTGGAG	GCC	GGAGCAG	GA	ACAGGTTG	AA	CAGTCTAC	CCT	CCCTTAG
6301	CAG	GGAATA	CT	CCACCCT	GG	AGCCTCCG	TAG	ACCTAAC	CAT	CTTCTCC	TT	ACACCTAG
6361	CAG	GTGTCTC	CT	CATCTTA	GGG	GCATCA	ATT	TATCAC	AA	CAATATC	AA	TATAAAC
6421	CCC	CTGCCAT	AA	CCAATAC	CAA	ACGCCCC	TCT	TCGTCTG	AT	CCGTCCCTA	AT	CACAGCAG
6481	TC	CTACTTCT	CCT	ATCTCTC	CC	AGTCCCTAG	CT	GCTGGCAT	CAC	TATACTA	CT	AACAGACC
6541	GCA	ACCTCAA	CAC	CACCTTC	TT	CGACCCCG	CC	GAGGAGG	AG	ACCCCAT	CT	ATACCAAC
6601	AC	CTATTCTG	AT	TTTTCGGT	CAC	CCTGAAG	TT	TATATTCT	TAT	CTTACCA	GG	CTTCGGAA
6661	TA	ATCTCCCA	TAT	TGTAAC	TAC	TACTCCG	GA	AAAAAAGA	ACC	ATTGGA	TAC	ATAGGTA
6721	TGG	TCTGAGC	TAT	GATATCA	ATT	TGGCTTCC	TAG	GGTTTAT	CG	TGTGAGCA	CAC	CATATAT
6781	TT	ACAGTAGG	AAT	AGACGTA	GAC	ACACGAG	CAT	ACTTAC	CT	CCGTACC	ATA	ATCATCG
6841	CT	ATCCCCAC	CG	GCGTCAAA	GT	ATTTAGCT	GAC	TCGCCAC	ACT	CCACGGA	AG	CAATATGA
6901	AAT	GATCTGC	TG	CAGTGCTC	TG	AGCCCTAG	GAT	TCTCTT	TCT	TTTACC	GT	AGGTGGCC
6961	TG	ACTGGCAT	TGT	ATTAGCA	AA	CTCATCAC	TAG	ACATCGT	ACT	TACAGAC	AC	GTACTACG
7021	TT	GTAGCTCA	CT	TCCACTAT	GT	CCTATCAA	TAG	GAGCTGT	ATT	TGCCATC	AT	AGGAGGCT
7081	TC	ATTCACTG	AT	TTCCCTA	TT	CTCAGGCT	AC	ACCTAGA	CCA	AACCTAC	GCC	AAATCC
7141	AT	TTCTGCTAT	CAT	ATTCATC	GG	CGTAAATC	TA	ACTTTCTT	CCC	ACAACAC	TTT	CTCGGCC
7201	TAT	CCGGAAT	G	CCCCGACGT	TAC	TCGGACT	AC	CCCGATGC	ATA	CACCACA	TG	AAATATCC
7261	TAT	CATCTGT	AG	GCTCATTC	AT	TTCTCTAA	CAG	CAGTAAT	AT	TAAATATT	TT	CATGATTT
7321	GAG	AAGCCTT	CG	TTCGAAG	CG	AAAAGTCC	TA	ATAGTAGA	AGA	ACCTCC	ATA	AACCTGG
7381	AG	TGACTATA	TGG	ATGCCCC	CC	ACCTACC	AC	ACATTCGA	AGA	ACCGTA	TAC	ATAAAAT
7441	CT	AGACAAA	AAG	GAAGGAA	TC	GAACCC	CAA	AGCTGGT	TT	CAAGCAA	CCC	CATGGCC
7501	TCC	ATGACTT	TTT	CAAAAAG	AT	ATTAGAAA	AA	CCATTTC	TA	ACTTTGTC	AA	AGTTAAAT
7561	TAT	AGGCTAA	AT	CTATATA	TCT	TAAATGGC	AC	ATGCAGCG	CA	AGTAGGTC	TAC	AAGACGC
7621	TAC	TTCCCTT	AT	CATAGAAG	AG	CTTATCAC	CT	TTTATGAT	CAC	GCCTCA	TA	ATCATTTT
7681	CCT	TATCTGC	TT	CCTAGTCC	TGT	ATGCCCT	TT	CCTAACA	CT	CACAACAA	AA	CTAACTAA
7741	TAC	TAAACATC	TC	AGACGCTC	AG	GAAATAGA	AA	CCGTCTGA	ACT	ATCCTGC	CC	GCCATCAT
7801	CCT	AGTCCTC	AT	CGCCCTCC	CAT	CCCTACG	CAT	CCTTTAC	ATA	ACAGACG	AG	GTC AACGA
7861	TCC	CTCCCTT	ACC	ATCAAAAT	CA	ATTGGCCA	CCA	ATGGTAC	TGA	ACCTACG	AG	TACACCGA
7921	CT	ACGGCGGA	CT	AATCTTCA	ACT	CCTACAT	ACT	TCCCCCA	TT	ATTCCTAG	AA	CCAGGCGA
7981	CCT	GCGACTC	CT	TGACGTTG	ACA	ATCGAGT	AG	TACTCCCG	ATT	GAGCCCC	CC	ATTCGTAT
8041	AAT	AATTACA	TC	ACAAGACG	TCT	TGCACTC	AT	GAGCTGTC	CCC	ACATTAG	GCT	TAAAAAC
8101	AG	ATGCAATT	CC	MGGACGTC	TAA	ACCAAAC	CAC	TTTACC	GCT	TACAGAC	CG	GGGTATA

8161	CTACGGTCAA	TGCTCTGAAA	TCTGTGGAGC	AAACCACAGT	TTCATGCCCC	TCGTCCTAGA
8221	ATTAATTTCCC	CTAAAAATCT	TTGAAATAGG	CCCCGTATTT	ACCCCTATAGC	ACCCCTCTA
8281	CCCCCTCTAG	AGCCCACTGT	AAAGCTAACT	TAGCATTAAAC	CTTTTAAAGTT	AAAGATTAAG
8341	AGAACCAACA	CCTCTTTTACA	GTGAAATGCC	CCAACATAAT	ACTACCGTAT	GGCCCAACCAT
8401	AATTACCCCC	ATACTCCTTA	CACTATTCTT	CATCACCCAA	CTAAAAATAT	TAAACACAAA
8461	CTACCACCTTA	CCTCCCTCAC	CAAAGCCCAT	AAAAATAAAA	AATTATAACA	AACCCTGAGA
8521	ACCAAAATGA	ACGAAAATCT	GTTTCGCTTCA	TTCATTGCCC	CCACAATCCT	AGGCCTACCC
8581	GCCGCAGTAC	TGATCATTCT	ATTTCCTCCCT	CTATTGATCC	CCACCTCCAA	ATATCTCATC
8641	AACAACCGAC	TAATTTACCAC	CCAACAATGA	CTAATCAAAC	TAACCTCAAA	ACAAATGATA
8701	GCCATACACA	ACACTAAAGG	ACGAACCTGA	TCTCTTATAC	TAGTATCCTT	AATCATTTTTT
8761	ATTGCCACAA	CTAACCTCCT	CGGACTCCTG	CCTCACTCAT	TTACACCAAC	CACCCAACTA
8821	TCTATAAACC	TAGCCATGGC	CATCCCTCTTA	TGAGCGGGCG	CAGTGATTAT	AGGCTTTTCGC
8881	TCTAAGATTA	AAAATGCCCT	AGCCCACTTC	TTACCACAAG	GCACACCTAC	ACCCCTTATC
8941	CCCATACTAG	TTATTATCGA	AACCATCAGC	CTACTCATT	AACCAATAGC	CCTGGCCGTA
9001	CGCCTAACCG	CTAACATTAC	TGCAGGCCAC	CTACTCATGC	ATCTAATTGG	AAGCGCCACC
9061	CTAGCAATAT	CAACCATTAA	CCTTCCTCT	ACACTTATCA	TCTTCACAAT	TCTAATTCTA
9121	CTGACTATCC	TAGAAATCGC	TGTCGCCTTA	ATCCAAGCCT	ACGTTTTTCAC	ACTTCTAGTA
9181	AGCCTCTACC	TGCACGACAA	CACATAATGA	CCCACCAATC	ACATGCCTAT	CATATAGTAA
9241	AACCCAGCCC	ATGACCCCTA	ACAGGGGCC	TCTCAGCCCT	CCTAATGACC	TCCGGCCTAG
9301	CCATGTGATT	TCACTTCCAC	TCCATAACGC	TCCTCATACT	AGGCCTGCTA	ACCAACACAC
9361	TAACCATATA	CCAATGATGG	CGCGATGTAA	CACGAGAAAG	CACATACCAA	GGCCACCACA
9421	CACCACCTGT	CCAAAAAGGC	CTTCGATACG	GGATAATCCT	ATTTATTACC	TCAGAAAGTTT
9481	TTTTCTTCGC	AGGATTTTTT	TGAGCCTTTT	ACCACCTCCAG	CCTAGCCCCT	ACCCCCAAC
9541	TAGGAGGGCA	CTGGCCCCCA	ACAGGCATCA	CCCCGCTAAA	TCCCCTAGAA	GTCCCCTCC
9601	TAAACACATC	CGTATTACTC	GCATCAGGAG	TATCAATCAC	CTGAGCTCAC	CATAGTCTAA
9661	TAGAAAACAA	CCGAAACCAA	ATAATTCAAG	CACTGCTTAT	TACAATTTTA	CTGGGTCTCT
9721	ATTTTACCCT	CCTACAAGCC	TCAGAGTACT	TCGAATCTCC	CTTCACCATT	TCCGACGGCA
9781	TCTACGGCTC	AACATTTTTT	GTAGCCACAG	GCTTCCACGG	ACTTCACGTC	ATTATTGGCT
9841	CAACTTTCTT	CACTATCTGC	TTCATCCGCC	AACTAATATT	TCACTTTTACA	TCCAAACATC
9901	ACTTTGGCTT	CGAAGCCGCC	GCCTGATACT	GGCATTTTTGT	AGATGTGGTT	TGACTATTTC
9961	TGTATGTCTC	CATCTATTGA	TGAGGGTCTT	ACTCTTTTAG	TATAAATAGT	ACCGTTAACT
10021	TCCAATTAAAC	TAGTTTTGAC	AACATTCAAA	AAAGAGTAAT	AAACTTCGCC	TTAATTTTAA
10081	TAATCAACAC	CCTCCTAGCC	TTACTACTAA	TAATTATTAC	ATTTTGACTA	CCACAACCTA
10141	ACGGCTACAT	AGAAAAATCC	ACCCCTTACG	AGTGCGGCTT	CGACCCTATA	TCCCCCGCCC
10201	GCGTCCCTTT	CTCCATAAAA	TTCTTCTTAG	TAGCTATTAC	CTTCTTATTA	TTTGATCTAG
10261	AAATTGCCCT	CCTTTTACCC	CTACCATGAG	CCCTACAAAC	AACTAACCTG	CCACTAATAG
10321	TTATGTCATC	CCTCTTATTA	ATCATCATCC	TAGCCCTAAG	TCTGGCCTAT	GAGTGACTAC
10381	AAAAAGGATT	AGACTGAGCC	GAATTGGTAT	ATAGTTTAAA	CAAAACGAAT	GATTTCGACT
10441	CATTAAATTA	TGATAATCAT	ATTTACCAAA	TGCCCCCTCAT	TTACATAAAT	ATTATACTAG
10501	CATTTACCAT	CTCACTTCTA	GGAATACTAG	TATATCGCTC	ACACCTCATA	TCCTCCCTAC
10561	TATGCCTAGA	AGGAATAATA	CTATCGCTAT	TCATTATAGC	TACTCTCATA	ACCTCAACA
10621	CCCACTCCCT	CTTAGCCAAT	ATTGTGCCTA	TTGCCATACT	AGTTTTTGCC	GCCTGCGAAG
10681	CAGCGGTAGG	CCTAGCCCTA	CTAGTCTCAA	TCTCCAACAC	ATATGGCCTA	GACTACGTAC
10741	ATAACCTAAA	CCTACTCCAA	TGCTAAAAC	AATCGTCCCA	ACAATTATAT	TACTACCACT
10801	GACATGACTC	TCCAAAAAAC	ACATAATTTG	AATCAACACA	ACCACCCACA	GCCTAATTAT
10861	TAGCATCATC	CCCCTACTAT	TTTTTAACCA	AATCAACAAC	AACCTATTTA	GCTGCTCCCC
10921	AACCTTTTCC	TCCGACCCCC	TAACAACCCC	CCTCCTAATA	CTAACTACCT	GACTCCTACC
10981	CCTCACAATC	ATGGCAAGCC	AACGCCACTT	ATCCAGTGAA	CCACTATCAC	GAAAAAACT
11041	CTACCTCTCT	ATACTAATCT	CCCTACAAAT	CTCCTTAATT	ATAACATTCA	CAGCCACAGA
11101	ACTAATCATA	TTTTATATCT	TCTTCGAAAC	CACACTTATC	CCCACCTTGG	CTATCATCAC
11161	CCGATGAGGC	AACCAGCCAG	AACGCCTGAA	CGCAGGCACA	TACTTCCTAT	TCTACACCCT
11221	AGTAGGCTCC	CTTCCCCTAC	TCATCGCACT	AATTTACACT	CACAACACCC	TAGGCTCACT
11281	AAACATTCTA	CTACTCACTC	TCACTGCCCC	AGAACTATCA	AACTCCTGAG	CCAACAACCTT
11341	AATATGACTA	GCTTACACAA	TAGCTTTTAT	AGTAAAGATA	CCTCTTTACG	GACTCCACTT
11401	ATGACTCCCT	AAAGCCCATG	TCGAAGCCCC	CATCGCTGGG	TCAATAGTAC	TTGCCGCGAGT
11461	ACTCTTAAAA	CTAGGCGGCT	ATGGTATAAT	ACGCCTCACA	CTCATTCTCA	ACCCCTGAC

11521	AAAACACATA	GCCTACCCCT	TCCTTGTACT	ATCCCTATGA	GGCATAATTA	TAACAAGCTC
11581	CATCTGCCTA	CGACAAACAG	ACCTAAAATC	GCTCATTGCA	TACTCTTCAA	TCAGCCACAT
11641	AGCCCTCGTA	GTAACAGCCA	TTCTCATCCA	AACCCCTGA	AGCTTCACCG	GCGCAGTCAT
11701	TCTCATAATC	GCCCACGGA	TTACATCCTC	ATTACTATT	TGCCTAGCAA	ACTCAAAC
11761	CGAACGCACT	CACAGTCGCA	TCATAATCCT	CTCTCAAGGA	CTTCAAAC	TACTCCCACT
11821	AATAGCTTTT	TGATGACTTC	TAGCAAGCCT	CGCTAACCTC	GCCTTACCCC	CCACTATTAA
11881	CCTACTGGGA	GAACCTCTCTG	TGCTAGTAAC	CACATTCTCC	TGATCAAATA	TCACTCTCCT
11941	ACTTACAGGA	CTCAACATAC	TAGTCACAGC	CCTATACTCC	CTCTACATAT	TTACCACAAC
12001	ACAATGAGGC	TCACCTACCC	ACCACATTAA	CAACATAAAA	CCCTCATTTA	CACGAGAAAA
12061	CACCCTCATG	TTCATACACC	TATCCCCCAT	TCTCCTCCTA	TCCCTCAACC	CCGACATCAT
12121	YACCGGGTTT	TCCTCTTGTA	AATATAGTTT	AACCAAAACA	TCAGATTGTG	AATCTGACAA
12181	CAGAGGCTTA	CGACCCCTTA	TTTACCGAGA	AAGCTCACAA	GAACGTCTAA	CTCATGCCCC
12241	CATGTCTAAC	AACATGGCTT	TCTCAACTTT	TAAAGGATAA	CAGCTATCCA	TTGGTCTTAG
12301	GCCCCAAAAA	TTTTGGTGCA	ACTCCAAATA	AAAGTAATAA	CCATGCACAC	TACTATAACC
12361	ACCCTAACCC	TGACTTCCCT	AATTCCTCCC	ATCCTTACCA	CCCTCGTTAA	CCCTAACAAA
12421	AAAAACTCAT	ACCCCATTA	TGTAAAATCC	ATTGTGCGAT	CCACCTTTAT	TATCAGTCTC
12481	TTCCCCACAA	CAATATTCAT	GTGCCTAGAC	CAAGAAGTTA	TTATCTCGAA	CTGACACTGA
12541	GCCACAACCC	AAACAACCCA	GCTCTCCCTA	AGCTTCAAAC	TAGACTACTT	CTCCATAATA
12601	TTCATCCCTG	TAGCATTGTT	CGTTACATGG	TCCATCATAG	AATTCTCACT	GTGATATATA
12661	AACTCAGACC	CAAACATTAA	TCAGTTCTTC	AAATATCTAC	TCATTCTCCT	AATTACCATG
12721	CTAATCTTAG	TTACCGCTAA	CAACCTATTC	CAACTGTTCA	TCGGCTGAGA	GGGCGTAGGA
12781	ATTATATCCT	TCTTGCTCAT	CAGTTGATGA	TACGCCCAG	CAGATGCCAA	CACAGCAGCC
12841	ATTCAAGCAA	TCCTATACAA	CCGTATCGGC	GATATCGGTT	TCATCCTCGC	CTTAGCATGA
12901	TTTATCCTAC	ACTCCAACTC	ATGAGACCCA	CAACAAATAG	CCCTTCTAAA	CGCTAATCCA
12961	AGCCTCACCC	CACACTAGG	CCTCCTCCTA	GCAGCAGCAG	GCAAATCAGC	CCAATTAGGT
13021	CTCCACCCCT	GACTCCCCTC	AGCCATAGAA	GGCCCCACCC	CAGTCTCAGC	CCTACTCCAC
13081	TCAAGCACTA	TAGTTGTAGC	AGGAGTCTTC	TTACTCATCC	GCTTCCACCC	CCTAGCAGAA
13141	AATAGCCAC	TAATCCAAAC	TCTAACACTA	TGCTTAGGCG	CTATCACCAC	TCTGTTTCGA
13201	GCAGTCTGCG	CCCTTACACA	AAATGACATC	AAAAAAATCG	TAGCCTTCTC	CACTTCAAGT
13261	CAACTAGGAC	TCATAGTAGT	TACAATCGGC	ATCAACCAAC	CACACCTAGC	ATTCTGTCAC
13321	ATCTGTACCC	ACGCCCTCTT	CAAAGCCATA	CTATTTATGT	GCTCCGGGTC	CATCATCCAC
13381	AACCTTAACA	ATGAACAAGA	TATTCGAAAA	ATAGGAGGAC	TACTCAAAAC	CATACCTCTC
13441	ACTTCAACCT	CCCTCACCAT	TGGCAGCCTA	GCATTAGCAG	GAATACCTTT	CCTCAGAGGT
13501	TTCTATTCCA	AAGACCACAT	CATCGAAACC	GCAAACATAT	CATACACAAA	CGCCTGAGCC
13561	CTATCTATTA	CTCTCATCGC	TACCTCCCTG	ACAAGCGCCT	ATAGCACTCG	AATAATTCTT
13621	CTCACCCCTA	CAGGTCAACC	TCGCTTCCCT	ACCCTTACTA	ACATTAACGA	AAATAACCCC
13681	ACCCTACTAA	ACCCCATTA	ACGCCCTGGCA	GCCGGAAGCC	TATTCGCAGG	ATTTCTCATT
13741	ACTAACAACA	TTTCCCCCGC	ATCCCCCTTC	CAACAACAA	TCCCCCTCTA	CCTAAACTC
13801	ACAGCCCTCG	CTGTCACTTT	CCTAGGACTT	CTAACAGCCC	TAGACCTCAA	CTACCTAACC
13861	AACAACTTA	AAATAAAATC	CCCCTATGCT	ACATTTTATT	TCTCCAACAT	ACTCGGATTC
13921	TACCCTAGCA	TCACACACCG	CACAATCCCC	TATCTAGGCC	TTCTTACGAG	CCAAAACCTG
13981	CCCCTACTCC	TCCTAGACCT	AACCTGACTA	GAAAAGCTAT	TACCTAAAAC	AATTTACAG
14041	CACCAATCT	CCACCTCCAT	CATCACCTCA	ACCAAAAAAG	GCATAATTAA	ACTTTACTTC
14101	CTCTCTTTCT	TCTTCCCACT	CATCCTAACC	CTACTCCTAA	TCACATAACC	TATTTCCCCG
14161	AGCAATCTCA	ATTACAATAT	ATACACCAAC	AAACAATGTT	CAACCAGTAA	CTACTACTAA
14221	TCAACGCCCA	TAATCATACA	AAGCCCCCGC	ACCAATAGGA	TCCTCCCGAA	TCAACCCTGA
14281	CCCCTCTCCT	TCATAAATTA	TTCAGCTTCC	TACACTATTA	AAGTTTACCA	CAACCACCAC
14341	CCCATCATAC	TCTTTCACCC	ACAGCACCAA	TCCTACCTCC	ATCGCTAACC	CCACTAAAAC
14401	ACTCACCAAG	ACCTCAACCC	CTGACCCCCA	TGCCTCAGGA	TACTCTCAA	TAGCCATCGC
14461	TGTAATATAT	CCAAAGACAA	CCATCATTTCC	CCCTAAATAA	ATTAAAAAAA	CTATTAAACC
14521	CATATAACCT	CCCCCAAAAT	TCAGAATAAT	AACACACCCG	ACCACACCCG	TAACAATCAA
14581	TACTAAACCC	CCATAAATAG	GAGAAGGCTT	AGAAGAAAAAC	CCCACAAAAC	CCATTACTAA
14641	ACCCACACTC	AACAGAAACA	AAGCATACAT	CATTATTCTC	GCACGGACTA	CAACCACGAC
14701	CAATGATATG	AAAAACCATC	GTTGTATTTT	AACTACAAGA	ACACCAATGA	CCCCAATACG
14761	CAAAATTAAC	CCCCTAATAA	AATTAATTAA	CCACTCATTC	ATCGACCTCC	CCACCCCATC
14821	CAACATCTCC	GCATGATGAA	ACTTCGGCTC	ACTCCTTGGC	GCCTGCCTGA	TCCTCCAAAT

14881	CACCACAGGA	CTATTCCTAG	CCATGCACTA	CTCACCAGAC	GCCTCAACCG	CCTTTTCATC
14941	AATCGCCAC	ATCACTCGAG	ACGTAAATTA	TGGCTGAATC	ATCCGCTACC	TTACAGCCAA
15001	TGGCGCCTCA	ATATTCTTTA	TCTGCCTCTT	CCTACACATC	GGGCGAGGCC	TATATTACGG
15061	ATCATTTCTC	TACTCAGAAA	CCTGAAACAT	CGGCATTATC	CTCCTGCTTG	CAACTATAGC
15121	AACAGCCTTC	ATAGGCTATG	TCCTCCCGTG	AGGCCAAATA	TCATTCTGAG	GGGCCACAGT
15181	AATTACAAAC	TTACTATCCG	CCATCCCATA	CATTGGGACA	GACCTAGTTC	AATGAATCTG
15241	AGGAGGCTAC	TCAGTAGACA	GTCCCACCT	CACACGATT	TTTACCTTTC	ACTTCATCTT
15301	GCCCTTCATT	ATTGCAGCCC	TAGCAGCACT	CCACCTCCTA	TTCTTGACG	AAACGGGATC
15361	AAACAACCCC	CTAGGAATCA	CCTCCCATTC	CGATAAAATC	ACCTTCCACC	CTTACTACAC
15421	AATCAAAGAC	GCCCTCGGCT	TACTTCTCTT	CCTTCTCTCC	TTAATAACAT	TAACACTATT
15481	CTCACCAGAC	CTCCTAGGCG	ACCCAGACAA	TTATACCCTA	GCCAACCCCT	TAAACACCCC
15541	TCCCCACATC	AAGCCCGAAT	GATATTTCTT	ATTGCGCTAC	ACAATTCTCC	GATCCGTCCC
15601	TAACAAACTA	GGAGGCGTCC	TTGCCCTATT	ACTATCCATC	CTCATCCTAG	CAATAATCCC
15661	CATCCTCCAT	ATATCCAAAC	AACAAAGCAT	AATATTTTCG	CCACTAAGCC	AATCACTTTA
15721	TTGACTCCTA	GCCGCAGACC	TCCTCATTCT	AACCTGAATC	GGAGGACAAC	CAGTAAGCTA
15781	CCCTTTTACC	ATCATTGGAC	AAGTAGCATC	CGTACTATAC	TTCACAACAA	TCCTAATCCT
15841	AATACCAACT	ATCTCCCTAA	TTGAAAACAA	AATACTCAA	TGGGCCTGTC	CTTGTAAGTAT
15901	AAACTAATAC	ACCAGTCTTG	TAAACCGGA	ATGAAAACCT	TTTCCAAGG	ACAAATCAGA
15961	GAAAAAGTCT	TTAACTCCAC	CATTAGCACC	CAAAGCTAAG	ATTCTAATTT	AAACTATTCT
16021	CTGTTCTTTC	ATGGGGAAGC	AGATTTGGGT	ACCACCCAAG	TATTGACTCA	CCCATCAACA
16081	ACCGCTATGT	ATTTCGTACA	TTACTGCCAG	CCACCATGAA	TATTGTAC	TACCATAAAT
16141	ACTTGACCAC	CTGTAGTACA	TAAAAACCCA	ATCCACATCA	AAACCC	CCCATGCTTA
16201	CAAGCAAGTA	CAGCAATCAA	CCTTCAACTG	TCACACATCA	ACYGCAACTC	CAAAGCCACC
16261	CCTCACCCAC	TAGGATACCA	ACAAACCTAC	CCACCCTTAA	CAGTACATAG	CACATAAAGC
16321	CATTTACCGT	ACATAGCACA	TTACAGTCAA	ATCCCTTCTC	GTCCCCATGG	ATGACCCCCC
16381	TCAGATAGGG	GTCCCTTGAC	CACCATCCTC	CGTGAAATCA	ATATCCCGCA	CAAGAGTGCT
16441	ACTCTCCTCG	CTCCGGGCCC	ATAACACTTG	GGGGTAGCTA	AAGTGAAGT	TATCCGACAT
16501	CTGGTTCCTA	CTTCAGGGC	ATAAAGCCTA	AATAGCCAC	ACGTTCCCCT	TAAATAAGAC
16561	ATCACGATG					

Nucleotide numbering is based on the rCRS (Andrews *et al.*, 1999). The sequence variants that differed from the rCRS were indicated in **bold**. The ambivalent sequence variants were indicated in **red** by the IUPAC codes; R = A or G; Y = C or T; S = G or C; M = A or C.

APPENDIX H

Tswana mtDNA consensus sequence variants that differed from the rCRS

This appendix contains a list of the 69 sequence variants of the Tswana consensus sequence that differed from the rCRS (Andrews *et al.*, 1999). These are the sequence variants that were present in the majority of the Tswana-speaking individuals of this investigation that differed from the rCRS sequence composition and therefore represent the baseline sequence variation of this Bantu-speaking population from South Africa.

Figure H.1 Mitochondrial consensus sequence for a Tswana-speaking population of South Africa

Position	Sequence variants	Gene/region	Frequency
73	A-G	Control region	42
146	T-C	Control region	39
152	T-C	Control region	37
195	T-C	Control region	39
247	G-A	Control region	38
315.1	insC	Control region	50
750	A-G	12S	50
769	G-A	12S	48
825	T-A	12S	38
1018	G-A	12S	48
1048	C-T	12S	38
1438	A-G	12S	23
2706	A-G	16S	38
2758	G-A	16S	38
2885	T-C	16S	38
3516	C-A	ND1	36
3594	C-T	ND1	48
4104	A-G	ND1	48
4232	T-C	ND1	27
4312	C-T	I	36
4769	A-G	ND2	50
5442	T-C	ND2	36
6185	T-C	COI	36
6815	T-C	COI	28
7028	C-T	COI	50

Table H.1 Continued...

Position	Sequence variants	Gene/region	Frequency
7146	A-G	COI	38
7256	C-T	COI	48
7521	G-A	D	48
8113	C-A	COII	27
8152	G-A	COII	27
8251	G-A	COII	27
8468	C-T	ATP8	37
8655	C-T	ATP6	38
8701	A-G	ATP6	50
8860	A-G	ATP6	50
9042	C-T	ATP6	36
9347	A-G	COIII	36
9540	T-C	COIII	50
9755	G-A	COIII	30
10398	A-G	ND3	50
10589	G-A	ND4L	36
10664	C-T	ND4L	36
10688	G-A	ND4L	38
10810	T-C	ND4	38
10873	T-C	ND4	50
10915	T-C	ND4	37
11719	G-A	ND4	50
11914	G-A	ND4	46
12007	G-A	ND4	36
12121	T-C	ND4	27
12705	C-T	ND5	49
12720	A-G	ND5	35
13105	A-G	ND5	39
13276	A-G	ND5	35
13506	C-T	ND5	38
13650	C-T	ND5	48
14766	C-T	CYTB	50
15326	A-G	CYTB	50
15466	G-A	CYTB	28
15930	G-A	T	27
15941	T-C	T	27
16129	G-A	Control region	24
16187	C-T	Control region	36
16189	T-C	Control region	44
16223	C-T	Control region	46
16230	A-G	Control region	35
16243	T-C	Control region	26

Table H.1 Continued...

16311	T-C	Control region	39
16519	T-C	Control region	39

Numbering according to rCRS. Gene/region: 12S = 12S ribosomal RNA, 16S = 16S ribosomal RNA; I = tRNA isoleucine; D = tRNA aspartic acid; T = tRNA threonine; *ND1* = NADH Dehydrogenase subunit 1; *ND2* = NADH Dehydrogenase subunit 2; *COI* = Cytochrome c oxidase subunit 1; *COII* = Cytochrome c oxidase subunit 2; *ATP8* = ATP synthase F0 subunit 8; *ATP6* = ATP synthase F0 subunit 6; *COIII* = Cytochrome c oxidase subunit 3; *ND3* = NADH Dehydrogenase subunit 3; *ND4L* = NADH Dehydrogenase subunit 4L; *ND4* = NADH Dehydrogenase subunit 4; *ND5* = NADH Dehydrogenase subunit 5; *CYTB* = Cytochrome b; frequency indicates the number of Tswana-speaking individuals of this investigation that displayed the sequence variant.