

APPENDIX

Reference tables to:

Evaluation of Y-chromosomal STRs: a multicenter study (Kayser et al.) and

Chromosome Y microsatellites: population genetic and evolutionary aspects (de Knijff et al.)

Table 1 Characteristics of Y-chromosomal STRs

Locus	Repeated motif	Number of repeats	Number of alleles (n)	Size range of alleles (bp)	Gene diversity*	PCR primer sequence (5'-3')	Locus GDB-ID
DYS19	(CTAT/C) _n	10–19	10 (5078)	174–210	0.72	CTACTGAGTTTCTGTTATAGT ATGGCATGTAGTGAGGACA	G00-121-409
DYS288	(CA) _n	– ^g	2 (86)	119–121	0.12 ^a	CATTACAAATACCTGGACACTG TTGCTTTGCTTGTTCATTTTCAGA	G00-139-631
DYS385 ^{c,i}	(GAAA) _n	9–22	49 ^d (587)	360–412	0.85	AGCATGGGTGACAGAGCTA TGGGATGCTAGGTAAAGCTG	G00-316-257
DYS388	(ATA) _n	– ^g	5 (82)	126–138	0.26 ^a	GTGAGTTAGCCGTTTAGCGA CAGATCGCAACCACTGCG	G00-365-729
DYS389I	(CTG/AT) _n	7–13	7 (1486)	239–263	0.61	CCAACTCTCATCTGTATTATCTAT TCTTATCTCCACCCACCAGA	G00-366-108
DYS389II	(CTG/AT) _n	23–31	9 (1474)	353–385	0.75	see DYS389I	see DYS389I
DYS390	(CTG/AT) _n	18–27	10 (2011)	191–227	0.73	TATATTTTACACATTTTTGGGCC TGACAGTAAAATGAACACATTGC	G00-366-115
DYS391	(CTAT) _n	8–13	6 (1058)	275–295	0.49	CTATTCATTCAATCATAACCCCA GATTCTTTGTGGTGGGTCTG	G00-366-118
DYS392	(ATT) _n	7–16	8 (1106)	236–263	0.52	TCATTAATCTAGCTTTTAAAAACAA AGACCCAGTTGATGCAATGT	G00-456-509
DYS393	(GATA) _n	9–15	6 (1170)	108–132	0.34	GTGGTCTTCTACTTGTGTCAATAC AACTCAAGTCCAAAAAATGAGG	G00-456-649
YCA I ^c	(CA) _n	– ^g	3 ^d (163)	124–132	0.10	CCCATGCCTGTCTCCAGATT GAGAGTGTGACACATCAGGTA	– ^e
YCA II ^c	(CA) _n	– ^g	28 ^d (581)	147–165	0.67	TATATTAAATAGAAGTAGTGTA TATCGATGTAATGTTATATTA	– ^e
YCA III ^c	(CA) _n	19–25 ^f	15 ^d (77)	192–204	0.87	CAACATTGTGTGAATGTGTGA TCCTCAGAGAAGGAGAACTA	– ^e
DXYS156Y ^h	(TAAAA) _n	– ^g	3 (250)	160–170	0.11 ^b	GTAGTGGTCTTTTGCCTCC CAGATACCAAGGTGAGAATC	G00-433-599

*GD: Genome diversity calculated from a German (Berlin) sample or a ^aCatalan sample (Barcelona) or a ^bDutch sample (Leiden), ^cprimer amplify two Y-chromosomal PCR-products, ^dclasses of alleles are proposed for those loci where the two Y-specific PCR fragments cannot be unambiguously assigned to either of the two loci, ^eMathias et al. 1994 - sequences are not submitted to the Hu-

man Genome Data Base (GDB), ^fC. Tyler-Smith personal communication, ^galleles not yet completely sequenced, ^hPCR primers also amplify chromosome X-specific products (at least 5 alleles, 125–155 bp), ⁱsequencing data provided by S. Meuser & P.M. Schneider, Mainz, manuscript in preparation

Table 2a Population data for DYS19 ($n = 5078$)¹

Population	10	11 ²	12	13	14	15	16	17	18	19	<i>n</i>
<i>Europe</i>											
Bern	0	0	0	0.14	0.56	0.23	0.06	0.01	0	0	100
Innsbruck	0	0	0.01	0.11	0.49	0.26	0.11	0.01	0	0	72
München 1	0	0	0	0.06	0.46	0.26	0.18	0.03	0	0	125
München 2	0	0	0	0.16	0.45	0.17	0.19	0.03	0	0	259
Münster	0	0	0	0.04	0.57	0.23	0.12	0.04	0	0	272
Köln	0	0	0	0.04	0.62	0.25	0.06	0.03	0	0	100
Jena	0	0	0	0.06	0.55	0.18	0.16	0.06	0	0	143
Heidelberg	0	0	0	0.07	0.50	0.29	0.09	0.04	0	0	113
Hannover [18]	0	0	0	0.07	0.49	0.23	0.13	0.07	0	0	53
Magdeburg	0	0	0	0.05	0.47	0.25	0.17	0.06	0	0	210
Brandenburg	0	0	0	0.03	0.45	0.27	0.15	0.10	0	0	96
Berlin 1	0	0	0	0.07	0.39	0.27	0.21	0.06	0	0	233
Bremen [18]	0	0	0	0.10	0.59	0.16	0.14	0	0	0	49
Leiden	0	0	0	0.04	0.70	0.19	0.03	0.02	0	0	88
Leicester, pooled	0	0	0.01	0.04	0.46	0.26	0.16	0.07	0.01	0	339
British [17]	0	0	0	0.05	0.80	0.10	0.02	0.02	0	0	41
Bratislava [18]	0	0	0	0.07	0.19	0.21	0.31	0.21	0	0	57
Romanians	0	0	0.02	0.22	0.29	0.20	0.22	0.05	0	0	59
Roma	0.01	0	0	0.13	0.52	0.26	0.05	0.03	0	0	100
Milano	0	0	0	0.06	0.64	0.20	0.06	0.04	0	0	50
Trieste	0	0	0	0.01	0.39	0.25	0.31	0.03	0	0	71
Udine	0	0	0	0.07	0.56	0.30	0.05	0.02	0	0	57
Verona [14]	0	0	0	0.07	0.51	0.31	0.10	0.01	0	0	202
Catalans	0	0	0	0.04	0.80	0.16	0	0	0	0	25
Basques 1	0	0	0	0.08	0.79	0.10	0	0.04	0	0	52
Basques 2	0	0	0.03	0	0.90	0	0	0.07	0	0	30
Iceland	0	0	0	0.07	0.64	0.07	0.14	0.07	0	0	28
<i>America</i>											
Inuit	0	0	0	0.77	0.16	0.03	0.03	0	0	0	62
Surinam	0	0	0.02	0.11	0.22	0.50	0.11	0.04	0	0	54
Buenos Aires, Caucasians	0	0	0	0.22	0.56	0.19	0.03	0	0	0	100
Belo Horizonte [17]	0	0	0	0.16	0.54	0.23	0.06	0.01	0	0	252
Mapuches	0	0	0	0.44	0.18	0.38	0	0	0	0	16
Tehuelches	0	0	0	0.16	0.42	0.42	0	0	0	0	12
Wichis	0	0	0	1.00	0	0	0	0	0	0	6
Yanomami	0	0	0	0.81	0.18	0	0	0	0	0	27
New York, Asians	0	0	0	0	0.16	0.52	0.28	0.04	0	0	25
New York, African Americans	0	0	0	0.05	0.23	0.38	0.18	0.15	0	0	81
New York, Hispanics	0	0	0.01	0.18	0.48	0.18	0.09	0.06	0	0	88
<i>Asia</i>											
Chinese	0	0	0	0	0.25	0.28	0.39	0.05	0.03	0	36
Mongolians	0	0	0	0	0.27	0.32	0.30	0.05	0.05	0	40
Osaka	0	0	0	0.13	0.05	0.49	0.22	0.11	0	0	150
Japan 1 [39]	0	0	0	0.08	0.03	0.51	0.23	0.15	0.01	0	221
Japan 2 [40]	0	0	0	0.06	0.06	0.41	0.24	0.21	0	0	172
Japan 3 [41]	0	0	0	0.05	0.07	0.46	0.19	0.23	0.01	0.01	200
India [17]	0	0	0	0	0.37	0.51	0.11	0	0	0	35
Pakistani [16]	0	0	0	0	0.18	0.54	0.20	0.08	0	0	35
Ahom [16]	0	0	0	0.05	0.57	0.33	0.05	0	0	0	21
Kachari [16]	0	0	0	0	0.68	0.25	0.07	0	0	0	28
NO-Thai [16]	0	0	0	0	0.07	0.69	0.14	0.10	0	0	42
SO-Thai [16]	0	0	0	0	0.42	0.50	0.14	0.10	0	0	12
Kampuchea [16]	0	0	0	0	0.18	0.36	0.45	0	0	0	11
Korea [16]	0	0	0	0	0.24	0.45	0.21	0.10	0	0	33
Taiwan [39]	0	0	0	0.07	0.29	0.29	0.29	0.07	0	0	14
Ami	0	0	0	0.14	0.14	0.57	0.14	0	0	0	7

Table 2a (continued)

Population	10	11 ²	12	13	14	15	16	17	18	19	<i>n</i>
<i>Oceania</i>											
Papua New Guinea, mainland 1	0	0	0	0	0.18	0.77	0	0	0.04	0	23
Papua New Guinea, mainland 2	0	0	0	0	0.52	0.48	0	0	0	0	50
S-Borneo	0	0	0	0.08	0.15	0.54	0.23	0	0	0	13
Trobriands	0	0	0	0.06	0.08	0.51	0.33	0.02	0	0	63
W-Samoa	0	0	0	0	0	0.20	0.80	0	0	0	10
<i>Africa</i>											
Pygmy	0	0	0	0	0.06	0.42	0.26	0.26	0	0	31
Ovambo	0	0	0	0.03	0.12	0.47	0.29	0.09	0	0	34
Morocco	0	0	0	0.58	0.24	0.16	0.02	0	0	0	50

¹ The listed data include already published data of 1478 male individuals as indicated by the citations (see Kayser et al.)

² Allele 11 has been observed in a single African individual at the GMI Berlin

Table 2b Population data for DYS389 I/II (*n* = 1486/1474)

Population	7 ¹	8	9	10	11	12	13	23	24	25	26	27	28	29	30	31 ²	<i>n</i>
<i>Europe</i>																	
Bern	0	0.02	0.21	0.59	0.18	0	0	0.01	0.04	0.13	0.41	0.25	0.12	0.04	0	0	100
Münster	0	0	0.18	0.69	0.12	0	0	0	0.02	0.36	0.33	0.23	0.05	0.01	0.01	0	124/118
Berlin 1	0	0	0.24	0.53	0.23	0	0	0	0	0.21	0.29	0.33	0.1	0.07	0	0	70
Leiden	0	0	0.27	0.60	0.12	0	0	0	0	0.31	0.41	0.25	0.03	0	0	0	88
Roma	0	0	0.24	0.57	0.18	0.01	0	0.01	0.03	0.14	0.36	0.31	0.10	0.04	0	0	100
Basque 2	0	0	0.03	0.43	0.53	0	0	0	0.03	0	0.40	0.40	0.10	0.07	0	0	30
Iceland	0	0	0.39	0.50	0.11	0	0	0	0.04	0.32	0.27	0.14	0.18	0.04	0	0	28/22
<i>America</i>																	
Inuit	0	0	0.08	0.16	0.60	0.14	0.02	0	0	0.06	0.14	0.34	0.24	0.19	0.02	0	62
Surinam	0	0	0.18	0.54	0.26	0.02	0	0.02	0.02	0.06	0.24	0.39	0.20	0.07	0	0	54
Buenos Aires, Caucasians	0	0	0.11	0.61	0.28	0	0	0	0	0.13	0.37	0.32	0.14	0.04	0	0	100
Mapuches	0	0	0	0.81	0.19	0	0	0	0	0.06	0.44	0.37	0.13	0	0	0	16
Tehuelches	0	0	0.08	0.67	0.25	0	0	0	0	0.08	0.50	0.17	0.17	0.08	0	0	12
Wichis	0	0	0	0.83	0.17	0	0	0	0	0	0.17	0.66	0.17	0	0	0	6
Yanomami	0	0	0	1.00	0	0	0	0	0	0	0.08	0.50	0.42	0	0	0	12
New York, Asians	0	0	0.60	0.20	0.20	0	0	0	0.12	0.32	0.48	0.04	0.04	0	0	0	25
New York, African Americans	0	0.02	0.16	0.63	0.18	0	0	0	0.01	0.06	0.20	0.43	0.26	0.04	0	0	81
New York, Hispanics	0	0	0.14	0.57	0.28	0.01	0	0	0	0.07	0.35	0.40	0.15	0.03	0	0	88
<i>Asia</i>																	
Chinese	0	0.03	0.51	0.14	0.31	0	0	0	0.11	0.31	0.19	0.19	0.19	0	0	0	36
Mongolians	0	0.02	0.10	0.70	0.17	0	0	0	0.05	0.22	0.40	0.20	0.12	0	0	0	40
Osaka	0	0	0.17	0.30	0.53	0	0	0	0	0.13	0.27	0.22	0.37	0	0	0	150
Ami	0	0	0.43	0.43	0.14	0	0	0	0	0.28	0.28	0.28	0.14	0	0	0	7
<i>Oceania</i>																	
Papua New Guinea, mainland 1	0	0	0.26	0.56	0.17	0	0	0	0	0.04	0.52	0.30	0.09	0	0.04	0	23
Papua New Guinea, mainland 2	0	0	0.27	0.53	0.18	0.02	0	0	0	0.08	0.45	0.28	0.08	0.11	0	0	53
S-Borneo	0	0	0.61	0.30	0.08	0	0	0	0	0.46	0.31	0.23	0	0	0	0	13
Trobriands	0	0.02	0.32	0.51	0.16	0	0	0	0.02	0.16	0.27	0.13	0.36	0.06	0	0	63
W-Samoa	0	0	0.20	0.60	0.20	0	0	0	0	0.10	0	0.60	0.20	0.10	0	0	10
<i>Africa</i>																	
Pygmy	0	0.13	0.32	0.42	0.06	0.06	0	0	0.03	0.35	0.26	0.16	0.06	0.06	0.06	0	31
Ovambo	0	0	0.23	0.64	0.14	0	0	0	0	0.26	0.22	0.22	0.04	0.17	0.09	0	23
Morocco	0	0	0.17	0.32	0.44	0.05	0.02	0	0	0.19	0.15	0.56	0.10	0	0	0	41

¹ Allele 7 has been observed in a single South African male

² Allele 31 has been observed in a single Mongolian male

Table 2c Population data for DYS390 ($n = 2011$)

Population	18 ¹	19	20	21	22	23	24	25	26	27	<i>n</i>
<i>Europe</i>											
Bern	0	0	0	0.03	0.14	0.28	0.39	0.16	0	0	64
Berlin 2	0	0	0	0.03	0.19	0.15	0.39	0.24	0	0	59
Berlin 1	0	0	0	0	0.09	0.36	0.26	0.23	0.07	0	70
Münster	0	0	0	0.03	0.16	0.26	0.37	0.17	0.01	0	114
Heidelberg	0	0	0	0	0.09	0.20	0.33	0.28	0.11	0	104
Leiden	0	0	0	0.01	0.18	0.39	0.32	0.07	0.02	0.01	88
Leicester, pooled	0	0.01	0	0.07	0.16	0.29	0.31	0.12	0.03	0.01	337
Roma	0	0	0	0.01	0.15	0.39	0.39	0.05	0.01	0	100
Catalans	0	0	0	0	0.07	0.17	0.69	0.07	0	0	29
Basques 1	0	0	0	0	0	0.17	0.77	0.06	0	0	53
Basques 2	0	0	0	0	0	0.17	0.73	0.10	0	0	30
<i>America</i>											
Inuit	0	0	0	0	0.05	0.06	0.86	0.03	0	0	62
Surinam	0	0	0	0.26	0.17	0.30	0.13	0.15	0	0	54
Buenos Aires, Caucasians	0	0	0	0.02	0.12	0.28	0.54	0.04	0	0	100
Mapuches	0	0	0	0	0	0.37	0.63	0	0	0	16
Tehuelches	0	0	0	0.17	0	0.25	0.58	0	0	0	12
Wichis	0	0	0	0	0	0.17	0.83	0	0	0	6
Yanomami	0	0	0	0	0.85	0.08	0.08	0	0	0	13
New York, Asians	0	0	0	0	0	0.68	0.20	0.12	0	0	25
New York, American Africans	0	0	0.01	0.52	0.12	0.14	0.17	0.04	0	0	81
New York, Hispanics	0	0	0	0.16	0.04	0.25	0.48	0.07	0	0	88
<i>Asia</i>											
Chinese	0	0	0	0.03	0.05	0.53	0.25	0.13	0	0	36
Mongolians	0	0	0	0	0.07	0.25	0.37	0.27	0	0.02	40
Osaka	0	0	0	0	0.16	0.19	0.22	0.35	0.07	0	150
Ami	0	0	0	0	0	0.14	0.86	0	0	0	7
<i>Oceania</i>											
Papua New Guinea, mainland 1	0	0	0.09	0	0	0.09	0.70	0.13	0	0	23
Papua New Guinea, mainland 2	0	0	0.15	0	0.02	0.27	0.52	0.04	0	0	48
S-Borneo	0	0	0	0.31	0.15	0.08	0.31	0.15	0	0	13
Trobriands	0	0	0.08	0.02	0.03	0.32	0.33	0.22	0	0	63
W-Samoa	0	0.10	0.50	0.10	0	0.10	0.20	0	0	0	10
<i>Africa</i>											
Pygmy	0	0	0	0.32	0.06	0.29	0.06	0.26	0	0	31
Ovambo	0	0	0	0.76	0.09	0	0.09	0.06	0	0	34
Morocco	0	0	0	0	0.12	0.18	0.55	0.16	0	0	51

¹ Allele 18 has been observed in a single African San male**Table 2d** Population data for DYS391 ($n = 1058$)

Population	8	9	10	11	12	13	<i>n</i>
<i>Europe</i>							
Bern	0	0	0.66	0.33	0.02	0	64
Berlin 1	0	0.03	0.64	0.31	0.01	0	70
Köln	0	0	0.64	0.27	0.09	0	11
Leiden	0	0.03	0.58	0.35	0.03	0	88
Roma	0	0.04	0.65	0.30	0.01	0	100
Trieste	0	0	0.46	0.54	0	0	71
Udine	0	0	0.56	0.38	0.03	0.02	57
Catalans	0	0.03	0.40	0.57	0	0	30
Basques 1	0	0.04	0.39	0.53	0.04	0	51
Basques 2	0	0.03	0.33	0.60	0.03	0	30

Table 2d (continued)

Population	8	9	10	11	12	13	<i>n</i>
<i>America</i>							
Inuit	0	0	0.81	0.19	0	0	62
Surinam	0	0.06	0.68	0.24	0.02	0	54
Buenos Aires, Caucasians	0	0.05	0.55	0.38	0.02	0	100
Mapuches	0	0	0.44	0.50	0.06	0	16
Wichis	0	0	1.00	0	0	0	6
Tehuelches	0	0.08	0.25	0.67	0	0	12
Yanomami	0	0	0.92	0.08	0	0	13
<i>Asia</i>							
Chinese	0	0	0.78	0.22	0	0	36
Mongolians	0	0.15	0.67	0.17	0	0	40
Ami	0	0	0.57	0.29	0.14	0	7
<i>Oceania</i>							
Papua New Guinea, mainland 1	0	0	0.74	0.26	0	0	23
S-Borneo	0	0.15	0.54	0.31	0	0	13
Trobriands	0	0.06	0.86	0.08	0	0	63
W-Samoa	0	0.10	0.80	0.10	0	0	10
<i>Africa</i>							
Pygmy	0.03	0.13	0.45	0.35	0.03	0	31

Table 2e Population data for DYS392 (*n* = 1106)

Population	7	10	11	12	13	14	15	16	<i>n</i>
<i>Europe</i>									
Bern	0	0	0.45	0.06	0.39	0.06	0.03	0	64
Berlin 1	0.01	0	0.64	0.07	0.26	0.03	0.01	0	70
Leiden	0	0	0.39	0.06	0.54	0.01	0	0	88
Roma	0	0	0.58	0.09	0.26	0.06	0	0.01	100
Trieste	0	0	0.70	0.27	0.03	0	0	0	71
Udine	0	0	0.44	0.42	0.14	0	0	0	57
Catalans	0	0	0.56	0.03	0.37	0.03	0	0	32
Basques 1	0	0	0.25	0	0.75	0	0	0	52
Basques 2	0	0	0.07	0	0.93	0	0	0	30
Iceland	0	0	0.54	0.07	0.36	0.04	0	0	28
<i>America</i>									
Inuit	0	0.02	0.11	0.02	0.56	0.27	0.02	0	62
Surinam	0	0.07	0.63	0.02	0.24	0.04	0	0	54
Buenos Aires, Caucasians	0	0.05	0.28	0.03	0.45	0.03	0.11	0.05	100
Mapuches	0	0	0.06	0	0.25	0.56	0.43	0	16
Tehuelches	0	0	0.25	0	0.25	0.42	0.08	0	12
Wichis	0	0	0.17	0	0	0.66	0.17	0	6
Yanomami	0	0	0	0	0	0.82	0.18	0	11
<i>Asia</i>									
Chinese	0	0	0.08	0.05	0.31	0.50	0.05	0	36
Mongolians	0	0	0.72	0.02	0.07	0.15	0	0.02	40
Ami	0	0	0.14	0	0.71	0	0.14	0	7
<i>Oceania</i>									
Papua New Guinea, mainland 1	0	0	0.09	0	0.87	0.04	0	0	23
S-Borneo	0	0	0.38	0	0.31	0.08	0.15	0.08	13
Trobriands	0	0	0.08	0	0.38	0.48	0.06	0	63
W-Samoa	0	0	0	0.70	0.10	0.10	0	0.10	10
<i>Africa</i>									
Africa, pooled	0	0.13	0.67	0.07	0.13	0	0	0	30
Pygmy	0	0	0.97	0.03	0	0	0	0	31

Table 2f Population data for DYS393 ($n = 1170$)

Population	9	11	12	13	14	15	n
<i>Europe</i>							
Bern	0	0.02	0.06	0.73	0.17	0.02	64
Berlin 1	0	0	0.04	0.80	0.10	0.06	70
Heidelberg	0	0	0.12	0.71	0.14	0.03	128
Köln	0	0	0.08	0.77	0.12	0.03	76
Roma	0	0.03	0.28	0.57	0.11	0.01	100
Trieste	0	0.01	0.15	0.73	0.04	0.06	71
Udine	0	0	0.21	0.58	0.16	0.05	57
Leiden	0	0	0.11	0.75	0.11	0.02	88
Basques 2	0	0	0.10	0.83	0.07	0	30
<i>America</i>							
Inuit	0	0	0	0.48	0.52	0	62
Surinam	0	0	0.18	0.46	0.31	0.04	54
Buenos Aires, Caucasians	0.02	0	0.16	0.66	0.14	0.02	100
Mapuches	0	0	0	0.87	0.13	0	16
Tehuelches	0	0	0.08	0.75	0.17	0	12
Wichis	0	0	0	1.00	0	0	6
Yanomami	0	0	0	1.00	0	0	13
<i>Asia</i>							
Chinese	0	0	0.53	0.31	0.14	0.03	36
Mongolians	0	0	0.22	0.62	0.15	0	40
Ami	0	0	0.28	0.14	0.43	0.14	7
<i>Oceania</i>							
Papua New Guinea, mainland 1	0	0	0	0.56	0.35	0.09	23
S-Borneo	0	0.08	0.38	0.23	0.23	0.08	13
Trobriands	0	0	0.02	0.86	0.13	0	63
W-Samoa	0	0	0	0.20	0.80	0	10
<i>Africa</i>							
Pygmy	0	0	0.06	0.42	0.35	0.16	31

Table 2g Population data for DYS288 ($n = 86$)

Population	119 (1)	121 (2)	n
<i>Europe</i>			
Catalans	0.06	0.94	33
Basques 1	0.02	0.98	53

Table 2h Population data for DYS388 ($n = 82$)

Population	126 (1)	129 (2)	132 (3)	135 (4)	138 (5)	n
<i>Europe</i>						
Catalans	0.03	0.86	0.03	0.03	0.03	29
Basques 1	0	0.89	0.06	0.02	0.04	53

Table 2i Population data for DYS385 ($n = 587$)

Population	9 15	9 16	9 17	10 10	10 12	10 13	10 14	10 10	11 11	11 12	11 13	11 14	11 15	11 16	11 17	12 12	12 13	12 14	12 15	12 16	12 17	12 20	13 13	13 14	13 15	13 16	
Europe																											
Berlin 1	0	0	0	0	0	0	0.09	0.01	0.03	0.01	0.34	0.04	0.01	0	0.01	0.01	0.03	0	0.01	0	0	0.01	0.09	0	0.01	0.01	
Magdeburg	0	0	0	0.01	0.01	0.02	0.03	0.01	0	0.07	0.38	0.05	0.02	0	0.01	0.04	0.04	0.03	0.02	0	0	0	0.05	0.04	0.01	0.01	
Berlin 3, pooled	0	0	0.01	0	0	0.01	0.03	0.01	0.01	0.02	0.27	0.06	0.01	0.01	0	0.01	0.04	0.01	0.03	0.01	0.01	0.01	0.04	0.04	0.04	0.01	
America																											
Buenos Aires, Caucasians	0	0	0	0.01	0.03	0.13	0.05	0	0	0.06	0.16	0.02	0.01	0	0	0	0.05	0.02	0.01	0	0	0.03	0.02	0	0.02	0.02	
Mapuches	0	0	0	0	0	0.06	0	0	0	0	0	0	0	0	0	0	0.06	0.18	0	0	0	0.06	0	0	0.13	0	
Tehuelches	0	0	0	0	0	0	0.08	0	0	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0.08	0	0	0	
Wichi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.17	0	0	0	0	
Yanomami	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08	
Oceania																											
Trobriands	0.11	0.02	0	0	0	0	0	0	0.03	0	0	0.02	0	0	0.16	0.02	0	0.05	0.11	0	0	0.03	0.14	0.08	0	0	
Population	13 17	13 18	13 19	14 14	14 15	14 16	14 17	14 18	15 15	15 16	15 17	15 18	15 19	15 20	16 16	16 17	16 18	16 19	16 22	17 17	17 18	17 19	18 18	18 19	18 19	<i>n</i>	
Europe																											
Berlin 1	0.01	0	0	0.03	0.05	0.01	0.03	0	0.09	0	0	0	0	0	0	0	0	0.03	0	0.01	0	0.01	0	0.01	0	77	
Magdeburg	0.01	0	0	0.01	0.03	0.03	0.02	0	0	0	0.01	0.01	0	0	0	0	0	0.01	0.02	0	0	0.02	0.01	0	0.01	164	
Berlin 3, pooled	0.02	0.04	0	0.04	0.04	0.01	0.03	0.01	0.02	0.01	0.02	0.01	0.01	0	0.01	0.01	0.01	0.01	0	0	0.03	0.01	0	0	0	136	
America																											
Buenos Aires, Caucasians	0	0.03	0.04	0.03	0.04	0	0.08	0.04	0	0	0	0.03	0	0.01	0	0.01	0	0.03	0	0.03	0	0	0	0.01	0	100	
Mapuche	0	0.13	0.06	0.06	0.13	0	0	0	0	0	0	0	0.13	0	0	0	0	0	0	0	0	0	0	0	0	16	
Tehuelche	0	0	0	0.17	0.17	0	0	0	0	0	0	0.08	0	0	0	0	0	0	0	0.17	0	0	0	0	0	12	
Wichi	0	0	0	0	0	0	0	0	0	0	0	0	0	0.66	0	0	0	0	0	0.17	0	0	0	0	0	6	
Yanomami	0	0	0.08	0	0.08	0.15	0.08	0.23	0	0	0.31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	
Oceania																											
Trobriand	0.06	0	0	0	0.05	0	0.02	0	0.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	

Table 2j Population data for YCA I ($n = 163$)

Population	1-3 124-128	3-3 128-128	3-5 128-132	n
<i>Europe</i>				
Berlin 1	0.05	0.95	0	87
<i>America</i>				
Yanomami	0	1.0	0	13
<i>Oceania</i>				
Trobriands	0	0.89	0.12	63

Table 2k Population data for YCA II ($n = 581$)

Population	1-3 147– 151	2-3 149– 151	2-4 149– 153	2-5 149– 155	2-6 149– 157	2-7 149– 159	3-3 151– 151	3-4 151– 153	3-5 151– 155	3-6 151– 157	3-7 151– 159	3-8 151– 161	4-4 153– 153	4-5 153– 155	4-6 153– 157
<i>Europe</i>															
Berlin 1	0	0	0	0	0	0.01	0.05	0.03	0.29	0.08	0.48	0	0.01	0.01	0
Magdeburg	0.01	0.01	0.02	0.01	0.01	0.01	0.05	0.01	0.24	0.08	0.38	0	0.03	0.02	0
<i>America</i>															
Buenos Aires, Caucasians	0	0	0	0	0	0.01	0.06	0.02	0.10	0.16	0.46	0.01	0.02	0.02	0.01
Mapuches	0	0	0	0	0	0	0	0	0.06	0.13	0.75	0	0	0	0
Tehuelches	0	0	0	0	0	0	0	0.17	0.08	0	0.50	0	0	0	0
Wichis	0	0	0	0	0	0	0	0	0.66	0	0.17	0	0	0	0
<i>Oceania</i>															
Trobriands	0	0	0.09	0	0	0	0.03	0.05	0.14	0.29	0.11	0	0.05	0	0.11
<i>Asia</i>															
Osaka	0	0	0	0.01	0.01	0	0.10	0.04	0.41	0.01	0.29	0	0	0.09	0.03
Population	4-7 153– 159	4-8 153– 161	4-9 153– 163	5-5 155– 155	5-6 155– 157	5-7 155– 159	5-10 155– 165	6-6 157– 157	6-7 157– 159	6-9 157– 163	7-7 159– 159	7-8 159– 161	8-8 161– 161	<i>n</i>	
<i>Europe</i>															
Berlin 1	0	0	0	0.01	0	0	0	0	0	0	0.01	0	0.01	77	
Magdeburg	0.01	0.01	0.01	0.04	0	0.01	0.01	0.01	0.03	0.01	0	0	0	157	
<i>America</i>															
Buenos Aires, Caucasians	0.01	0	0	0.03	0.05	0	0	0	0.01	0	0.01	0.02	0	100	
Mapuches	0.06	0	0	0	0	0	0	0	0	0	0	0	0	16	
Tehuelches	0.25	0	0	0	0	0	0	0	0	0	0	0	0	12	
Wichis	0	0	0	0	0	0	0	0	0.17	0	0	0	0	6	
<i>Oceania</i>															
Trobriands	0.02	0	0	0.03	0	0	0	0.08	0	0	0	0	0	63	
<i>Asia</i>															
Osaka	0	0	0	0	0	0.01	0	0.01	0.01	0	0	0	0	150	

Table 2l Population data for YCA III ($n = 77$)

Population	19 19	19 20	20 20	20 21	20 22	20 23	21 21	21 22	21 23	21 25	22 22	22 23	22 24	22 25	23 23	<i>n</i>
<i>Europe</i>																
Berlin 1	0.04	0.01	0.06	0.16	0.03	0.04	0.23	0.09	0.03	0.01	0.17	0.03	0.08	0.01	0.01	77

Table 2m Population data for DXYS156Y ($n = 250$)

Population	160 (Y6)	165 (Y7)	170 (Y8)	<i>n</i>
<i>Europe</i>				
Leiden	0.05	0.94	0.01	89
Bern	0	0.97	0.02	99
<i>America</i>				
Inuit	0	1.00	0	62

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