

TH01

Population	Ref.	n	4	5	6	7	8	9	9.3	10	11	> 11	S
Europe													
Europe (Basques, Catalans, Northern Italians, Northern Europeans)	(88)	217	0.0000	0.0000	0.2140	0.1450	0.1400	0.1840	0.3080	0.0060	0.0000	0.0000	0.9970
Albania (Tirana)	(166, 179)	100	0.0000	0.0000	0.3250	0.1150	0.1450	0.1850	0.2250	0.0050	0.0000	0.0000	1.0000
Albania (Andon Poci, Aromuns)	(166, 179)	100	0.0000	0.0000	0.2850	0.1500	0.1750	0.1700	0.2200	0.0000	0.0000	0.0000	1.0000
Austria (pooled)		1816	0.0000	0.0022	0.2246	0.1551	0.1178	0.1698	0.3162	0.0137	0.0007	0.0000	1.0001
Austria (pooled)		2298	0.0000	0.0021	0.2260	0.1591	0.1145	0.1712	0.3255		0.0009	0.0000	0.9993
Austria	(1)	206	0.0000	0.0020	0.2310	0.1630	0.1120	0.1920	0.2890		0.0100	0.0000	0.9990
Austria	(222)	204	0.0000	0.0070	0.2330	0.1350	0.1070	0.1960	0.3090	0.0120	0.0000	0.0000	0.9990
Austria (West)	(2, 91)	382	0.0000	0.0000	0.2290	0.1570	0.1220	0.1520	0.3310	0.0090	0.0000	0.0000	1.0000
Austria (Graz area)	(76, 100)	457	0.0000	0.0030	0.2140	0.1620	0.1140	0.1820	0.3140	0.0100	0.0000	0.0000	0.9990
Austria (Innsbruck area)	(182)	164	0.0000	0.0000	0.1980	0.1860	0.1280	0.1070	0.3750	0.0060	0.0000	0.0000	1.0000
Austria (Salzburg region)	(68)	276	0.0000	0.0018	0.2319	0.1830	0.0942	0.1649	0.3243		0.0000	0.0000	1.0001
Austria (Vienna)	(216)	609	0.0000	0.0020	0.2340	0.1470	0.1190	0.1800	0.2950	0.0220	0.0020	0.0000	1.0010
Basques (pooled)		859	0.0000	0.0000	0.2398	0.1275	0.1251	0.1886	0.3085	0.0105	0.0000	0.0000	1.0000
Basques (Spain)	(3)	100	0.0000	0.0000	0.1900	0.1600	0.0950	0.1650	0.3650	0.0250	0.0000	0.0000	1.0000
Basques (Spain, Gipuzkoa province)	(124)	50	0.0000	0.0000	0.2000	0.0900	0.1100	0.2100	0.3700	0.0200	0.0000	0.0000	1.0000
Basques (Northern Spain)	(139)	200	0.0000	0.0000	0.2300	0.1600	0.1225	0.2100	0.2600	0.0175	0.0000	0.0000	1.0000
Basques (autochthonous)	(77, 95)	205	0.0000	0.0000	0.3049	0.0878	0.1244	0.1976	0.2805	0.0049	0.0000	0.0000	1.0001
Basques (autochthonous)	(202)	304	0.0000	0.0000	0.2253	0.1283	0.1398	0.1727	0.3306	0.0033	0.0000	0.0000	1.0000
Belgium (Flanders)	(69)	245	0.0000	0.0020	0.2367	0.1347	0.1347	0.1449	0.3388	0.0082	0.0000	0.0000	1.0000
Croatia (pooled)		179	0.0000	0.0000	0.2374	0.1816	0.1145	0.1564	0.2766	0.0335	0.0000	0.0000	1.0000
Croatia (pooled)		408	0.0000	0.0026	0.2437	0.1127	0.0930	0.2292	0.3163		0.0025	0.0000	1.0000

Croatia (Island of Brac)	(180)	98	0.0000	0.0000	0.2092	0.1224	0.1224	0.2143	0.2959	0.0357	0.0000	0.0000	0.9999
Croatia (Island of Brac, Lozisca and Sutivan)	(180)	25	0.0000	0.0000	0.1400	0.1600	0.2000	0.1000	0.3200	0.0800	0.0000	0.0000	1.0000
Croatia (Island of Brac, Dracevica, Donji Humac and Nerezzisca)	(180)	24	0.0000	0.0000	0.1875	0.1250	0.1042	0.1875	0.3958	0.0000	0.0000	0.0000	1.0000
Croatia (Island of Brac, Praznica and Gornji Humac)	(180)	24	0.0000	0.0000	0.2500	0.1250	0.0625	0.3125	0.2500	0.0000	0.0000	0.0000	1.0000
Croatia (Island of Brac, Selca, Novo Selo and Povlja)	(180)	25	0.0000	0.0000	0.2600	0.0800	0.1200	0.2600	0.2200	0.0600	0.0000	0.0000	1.0000
Croatia (Zagreb)	(4)	100	0.0000	0.0000	0.3000	0.0900	0.1000	0.1750	0.3250		0.0100	0.0000	1.0000
Croatia (Zagreb area) **	(182)	138	0.0000	0.0000	0.2790	0.1120	0.1120	0.2030	0.2860	0.0070	0.0000	0.0000	0.9990
Croatia (Island of Hvar) (pooled)	(154)	210	0.0000	0.0050	0.2330	0.1190	0.0760	0.2620	0.2860	0.0190	0.0000	0.0000	1.0000
Croatia (Bogomolje, Island of Hvar)	(154)	36	0.0000	0.0000	0.1670	0.1390	0.1110	0.1940	0.3330	0.0560	0.0000	0.0000	1.0000
Croatia (Dol, Island of Hvar)	(154)	40	0.0000	0.0250	0.2250	0.1000	0.0500	0.2500	0.3500	0.0000	0.0000	0.0000	1.0000
Croatia (Gdinj, Island of Hvar)	(154)	30	0.0000	0.0000	0.1330	0.1330	0.0670	0.3330	0.3330	0.0000	0.0000	0.0000	0.9990
Croatia (Svirce, Island of Hvar)	(154)	30	0.0000	0.0000	0.2670	0.1000	0.0330	0.3670	0.2330	0.0000	0.0000	0.0000	1.0000
Croatia (Vrbanj, Island of Hvar)	(154)	38	0.0000	0.0000	0.3160	0.1320	0.0790	0.2110	0.2110	0.0530	0.0000	0.0000	1.0020
Croatia (Zastrazišće, Island of Hvar)	(154)	36	0.0000	0.0000	0.2780	0.1110	0.1110	0.2500	0.2500	0.0000	0.0000	0.0000	1.0000
Czech Republic	(121, 123)	82	0.0000	0.0120	0.2620	0.1340	0.0790	0.2070	0.2870	0.0120	0.0061	0.0000	0.9991
Denmark	(5)	199	0.0000	0.0000	0.2460	0.2010	0.1240	0.0950	0.3310	0.0030	0.0000	0.0000	1.0000
Estonia	(111)	100	0.0000	0.0000	0.2750	0.1550	0.0700	0.1850	0.3100	0.0050	0.0000	0.0000	1.0000
Finland (pooled)		3567	0.0000	0.0002	0.2097	0.2295	0.1314	0.1514	0.2780		0.0000	0.0000	1.0002
Finland	(120, 123)	180	0.0000	0.0000	0.2000	0.2330	0.1140	0.1500	0.2890	0.0140	0.0000	0.0000	1.0000
Finland	(6)	3387	0.0000	0.0002	0.2102	0.2293	0.1323	0.1515	0.2767		0.0000	0.0000	1.0002
France (pooled) (Corsica not included)		353	0.0000	0.0029	0.2371	0.1834	0.1139	0.1424	0.3179		0.0026	0.0000	1.0002
France	(7)	110	0.0000	0.0000	0.2380	0.1520	0.1290	0.1750	0.3020		0.0040	0.0000	1.0000
France	(8)	194	0.0000	0.0052	0.2500	0.1881	0.1108	0.1392	0.3067		0.0000	0.0000	1.0000
France	(172)	49	0.0000	0.0000	0.1840	0.2350	0.0920	0.0820	0.3980	0.0000	0.0100	0.0000	1.0010

France (Corsica) (pooled)		179	0.0000	0.0000	0.2374	0.1816	0.1145	0.1564	0.2766	0.0335	0.0000	0.0000	<i>1.0000</i>
France (Upper Corsica)	(194)	96	0.0000	0.0000	0.2188	0.2135	0.1250	0.1354	0.2865	0.0208	0.0000	0.0000	<i>1.0000</i>
France (southern Corsica)	(194)	83	0.0000	0.0000	0.2590	0.1446	0.1024	0.1807	0.2651	0.0482	0.0000	0.0000	<i>1.0000</i>
Germany (pooled)		7373	0.0000	0.0027	0.2234	0.1604	0.1131	0.1655	0.3174	0.0172	0.0003	0.0000	<i>1.0000</i>
Germany (pooled)		10285	0.0000	0.0036	0.2229	0.1598	0.1155	0.1641	0.3337		0.0006	0.0000	<i>1.0002</i>
Germany	(142)	200	0.0000	0.0050	0.2150	0.1930	0.0950	0.1350	0.3530	0.0050	0.0000	0.0000	<i>1.0010</i>
Germany	(83)	290	0.0000	0.0000	0.2207	0.1845	0.1259	0.1500	0.3034	0.0155	0.0000	0.0000	<i>1.0000</i>
Germany	(152)	195	0.0000	0.0100	0.2300	0.2100	0.1100	0.1400	0.3100	0.0000	0.0000	0.0000	<i>1,0100</i>
Germany (North)	(9)	268	0.0000	0.0000	0.2180	0.1600	0.1030	0.1720	0.3470		0.0000	0.0000	<i>1.0000</i>
Germany (North)	(172)	51	0.0000	0.0000	0.2060	0.1570	0.0880	0.1670	0.3630	0.0200	0.0000	0.0000	<i>1.0010</i>
Germany (North-West)	(10, 151, 224)	694	0.0000	0.0030	0.2260	0.1670	0.1160	0.1490	0.3200	0.0170	0.0010	0.0000	<i>0.9990</i>
Germany (South)	(11)	2007	0.0000	0.0015	0.2190	0.1505	0.1148	0.1726	0.3286	0.0127	0.0002	0.0000	<i>0.9999</i>
Germany (South-West)	(12)	305	0.0000	0.0049	0.2131	0.1656	0.1033	0.1869	0.3049	0.0213	0.0000	0.0000	<i>1.0000</i>
Germany (South-West)	(107)	484	0.0000	0.0052	0.2107	0.1653	0.1157	0.1715	0.3171	0.0145	0.0000	0.0000	<i>1.0000</i>
Germany (South-West)	(95)	628	0.0000	0.0010	0.2350	0.1410	0.1210	0.1620	0.3400		0.0000	0.0000	<i>1.0000</i>
Germany (North Bavaria)	(137)	130	0.0000	0.0000	0.3040	0.1420	0.1190	0.1420	0.2920	0.0000	0.0000	0.0000	<i>0.9990</i>
Germany (Berlin / Brandenburg)	(13)	589	0.0000	0.0010	0.2240	0.1620	0.1120	0.1750	0.3010	0.0250	0.0000	0.0000	<i>1.0000</i>
Germany (Lower Franconia)	(14)	183	0.0000	0.0030	0.2320	0.1610	0.1230	0.1900	0.2730	0.0190	0.0000	0.0000	<i>1.0010</i>
Germany (Northrhine-Westphalia)	(15)	556	0.0000	0.0072	0.2275	0.1439	0.1187	0.1628	0.3399		0.0000	0.0000	<i>1.0000</i>
Germany (Saxony)	(16)	300	0.0000	0.0030	0.2320	0.1580	0.0930	0.1700	0.3330	0.0100	0.0000	0.0000	<i>0.9990</i>
Germany (Thuringia)	(92)	391	0.0000	0.0038	0.2455	0.1381	0.1381	0.1701	0.2788	0.0256	0.0000	0.0000	<i>1.0000</i>
Germany (Aachen)	(108)	302	0.0000	0.0017	0.2070	0.1573	0.1507	0.1440	0.3344	0.0050	0.0000	0.0000	<i>1.0001</i>
Germany (Bochum, Essen, Recklinhausen)	(79)	150	0.0000	0.0070	0.2130	0.1930	0.0830	0.1900	0.3100	0.0030	0.0030	0.0000	<i>1.0020</i>
Germany (Bonn)	(82)	257	0.0000	0.0080	0.2310	0.1690	0.1050	0.1670	0.3080	0.0140	0.0000	0.0000	<i>1.0020</i>
Germany (Bremen)	(125)	100	0.0000	0.0050	0.2000	0.2150	0.0950	0.1350	0.3250	0.0250	0.0000	0.0000	<i>1.0000</i>
Germany (Düsseldorf)	(15, 183)	498	0.0000	0.0110	0.1857	0.1747	0.1225	0.1687	0.3313		0.0060	0.0000	<i>0.9999</i>
Germany (Eschweiler, Stolberg)	(72, 183)	272	0.0000	0.0129	0.2114	0.1618	0.1305	0.1489	0.3327		0.0018	0.0000	<i>1.0000</i>
Germany (Giessen)	(17)	50	0.0000	0.0100	0.2300	0.1700	0.0900	0.1800	0.3100	0.0100	0.0000	0.0000	<i>1.0000</i>

Germany (Göttingen)	(18)	460	0.0000	0.0011	0.2380	0.1370	0.0978	0.1576	0.3087	0.0587	0.0011	0.0000	1.0000
Germany (Hamburg)	(70)	108	0.0000	0.0046	0.2176	0.1667	0.1111	0.1574	0.3426		0.0000	0.0000	1.0000
Germany (Hannover)	(125)	100	0.0000	0.0000	0.2150	0.1600	0.1000	0.1550	0.3550	0.0150	0.0000	0.0000	1.0000
Germany (Inden, Langerwehe, Hürtgenwald)	(72, 183)	277	0.0000	0.0036	0.2509	0.1480	0.1498	0.1408	0.3051		0.0018	0.0000	1.0000
Germany (Köln)	(125)	122	0.0000	0.0040	0.2210	0.1720	0.1070	0.1890	0.3030	0.0040	0.0000	0.0000	1.0000
Germany (Münster)	(19)	110	0.0000	0.0020	0.2310	0.1630	0.1120	0.1920	0.2890		0.0100	0.0000	0.9990
Germany (Rostock)	(85)	208	0.0000	0.0024	0.2091	0.1899	0.1106	0.1394	0.3462	0.0024	0.0000	0.0000	1.0000
Greece (pooled)		585	0.0000	0.0000	0.2992	0.1461	0.1238	0.2223	0.2060	0.0025	0.0000	0.0000	0.9999
Greece (Northeast)	(179)	109	0.0000	0.0000	0.2569	0.1330	0.1239	0.2248	0.2615	0.0000	0.0000	0.0000	1.0001
Greece (East Macedonia)	(229)	95	0.0000	0.0000	0.3370	0.1630	0.1420	0.2000	0.1580	0.0000	0.0000	0.0000	1.0000
Greece (Central Macedonia)	(229)	99	0.0000	0.0000	0.2880	0.1210	0.1310	0.2220	0.2370	0.0000	0.0000	0.0000	0.9990
Greece (Thessaly)	(229)	97	0.0000	0.0000	0.2780	0.1750	0.1130	0.1860	0.2470	0.0000	0.0000	0.0000	0.9990
Greece (Epirus)	(229)	99	0.0000	0.0000	0.2930	0.1620	0.1010	0.2530	0.1770	0.0150	0.0000	0.0000	1.0010
Greece (living in Asia Minor)	(229)	86	0.0000	0.0000	0.3550	0.1220	0.1340	0.2500	0.1400	0.0000	0.0000	0.0000	1.0010
Hungary (pooled)		1040	0.0000	0.0039	0.2193	0.1549	0.1112	0.1964	0.3056	0.0097	0.0000	0.0000	1.0010
Hungary	(185)	95	0.0000	0.0000	0.2105	0.1211	0.0947	0.2684	0.3053	0.0000	0.0000	0.0000	1.0000
Hungary	(21)	244	0.0000	0.0041	0.2070	0.1557	0.1270	0.1721	0.3258	0.0082	0.0000	0.0000	0.9999
Hungary	(22)	367	0.0000	0.0041	0.2139	0.1621	0.1158	0.1853	0.3106	0.0082	0.0000	0.0000	1.0000
Hungary (South)	(99)	111	0.0000	0.0100	0.2700	0.1500	0.0700	0.2000	0.2900	0.0200	0.0000	0.0000	1,0100
Hungary (Budapest)	(20)	223	0.0000	0.0020	0.2200	0.1590	0.1140	0.2090	0.2830	0.0130	0.0000	0.0000	1.0000
Hungary (Roma)	(74)	135	0.0000	0.0000	0.2370	0.0850	0.2330	0.1810	0.2590	0.0040	0.0000	0.0000	0.9990
Italy (pooled) (Sardineans included) (Rare alleles: 0.0001)		4900	0.0001	0.0016	0.2529	0.1581	0.1308	0.1950	0.2394	0.0205	0.0006	0.0000	0.9991
Italy (pooled) (Sardineans included) (Rare alleles: 0.0002)		6148	0.0001	0.0014	0.2554	0.1570	0.1319	0.1939	0.2566		0.0027	0.0000	0.9992
Italy (pooled) (Sardineans not included) (Rare alleles: 0.0001)		4568	0.0001	0.0014	0.2535	0.1586	0.1309	0.1926	0.2410	0.0203	0.0007	0.0000	0.9992
Italy (pooled) (Sardineans not included) (Rare alleles: 0.0002)		6045	0.0001	0.0012	0.2559	0.1574	0.1320	0.1920	0.2578		0.0026	0.0000	0.9992
Italy	(23)	1305	0.0000	0.0008	0.2410	0.1605	0.1307	0.1916	0.2571	0.0176	0.0008	0.0000	1.0001

Italy	(218)	618	0.0000	0.0020	0.2710	0.1550	0.1200	0.2010	0.2310	0.0200	0.0010	0.0000	1.0010
Italy	(24)	217	0.0000	0.0000	0.2390	0.1580	0.1550	0.1900	0.2500		0.0070	0.0000	0.9990
Italy	(25)	164	0.0000	0.0000	0.2440	0.1490	0.1250	0.2470	0.2290		0.0060	0.0000	1.0000
Italy	(27)	101	0.0000	0.0050	0.3168	0.1188	0.1139	0.1584	0.2871		0.0000	0.0000	1.0000
Italy	(152)	232	0.0000	0.0000	0.2650	0.1400	0.1530	0.1780	0.2520	0.0100	0.0000	0.0000	0.9980
Italy**	(133)	223	0.0000	0.0000	0.2780	0.1320	0.1120	0.2020	0.2690	0.0040	0.0020	0.0000	0.9990
Italy	(141)	205	0.0000	0.0000	0.2927	0.1293	0.1098	0.1951	0.2585	0.0122	0.0024	0.0000	1.0000
Italy	(26)	202	0.0000	0.0025	0.2574	0.1510	0.1559	0.1634	0.2574	0.0173	0.0000	0.0000	1.0049
Italy (North: Brescia area)	(106)	103	0.0000	0.0000	0.1602	0.1456	0.1699	0.1942	0.3010	0.0291	0.0000	0.0000	1.0000
Italy (Northeast)	(114, 123)	196	0.0000	0.0000	0.2440	0.2000	0.1190	0.1940	0.2390	0.0040	0.0000	0.0000	1.0000
Italy (Northwest)	(113, 123)	100	0.0000	0.0000	0.2300	0.1600	0.1500	0.1700	0.2850	0.0050	0.0000	0.0000	1.0000
Italy (North, Central, South)	(160)	756	0.0007	0.0007	0.2657	0.1601	0.1349	0.1991	0.2004	0.0377	0.0007	0.0000	1.0000
Italy (South, Reggio Calabria)	(197)	100	0.0000	0.0250	0.2400	0.1600	0.1200	0.2450	0.1850	0.0250	0.0000	0.0000	1.0000
Italy (South, Catanzaro)	(197)	100	0.0000	0.0000	0.2850	0.1850	0.1050	0.2050	0.2000	0.0200	0.0000	0.0000	1.0000
Italy (South, Cosenza)	(197)	100	0.0000	0.0100	0.2450	0.1150	0.1650	0.2250	0.1750	0.0650	0.0000	0.0000	1.0000
Italy (Sicily, Messina)	(152)	140	0.0000	0.0000	0.2170	0.1850	0.1420	0.2030	0.2070	0.0420	0.0000	0.0000	0.9960
Italy (Central, Tuscany)	(192)	188	0.0000	0.0000	0.2270	0.1960	0.1020	0.1990	0.2600	0.0170	0.0000	0.0000	1.0010
Italy (Tuscany) (Rare alleles: 0.0022)	(112)	229	0.0000	0.0000	0.2630	0.1600	0.1440	0.1380	0.2730	0.0000	0.0000	0.0000	1.0000
Italy (Calabria)	(29)	178	0.0000	0.0000	0.3090	0.1660	0.1210	0.2220	0.1570		0.0250	0.0000	1.0000
Italy (Ancona) (Rare alleles: 0.0070)	(28)	142	0.0000	0.0000	0.2394	0.1584	0.1549	0.1901	0.2500		0.0000	0.0000	0.9998
Italy (Parma)	(28)	146	0.0000	0.0000	0.3253	0.1233	0.1096	0.1644	0.2671		0.0103	0.0000	1.0000
Italy (Pavia)	(28)	150	0.0000	0.0000	0.2300	0.1500	0.1567	0.1767	0.2833		0.0033	0.0000	1.0000
Italy (Pisa)	(28)	150	0.0000	0.0000	0.2400	0.1833	0.1433	0.1467	0.2633		0.0233	0.0000	0.9999
Italy (Sardinia)	(96)	103	0.0000	0.0097	0.2282	0.1359	0.1262	0.3058	0.1650	0.0291	0.0000	0.0000	0.9999
Macedonia (Stip region, Aromuns)	(179)	103	0.0000	0.0000	0.2961	0.0922	0.1990	0.1796	0.2330	0.0000	0.0000	0.0000	0.9999
Netherlands (pooled)		403	0.0000	0.0074	0.2295	0.2059	0.1042	0.1427	0.3102		0.0000	0.0000	0.9999
Netherlands	(30)	195	0.0000	0.0077	0.2282	0.2051	0.1051	0.1436	0.3103		0.0000	0.0000	1.0000
Netherlands	(27)	208	0.0000	0.0072	0.2308	0.2067	0.1034	0.1418	0.3101		0.0000	0.0000	1.0000

Norway	(31)	300	0.0000	0.0000	0.2200	0.2280	0.0880	0.1300	0.3320	0.0020	0.0000	0.0000	1.0000
Poland (pooled)		1188	0.0000	0.0039	0.2469	0.1270	0.1135	0.1957	0.2869	0.0257	0.0000	0.0000	0.9996
Poland (North, Gdansk area)	(32, 142, 155)	203	0.0000	0.0024	0.2487	0.1256	0.1206	0.1847	0.3054	0.0123	0.0000	0.0000	0.9997
Poland (Northeast, Podlasie)	(209)	280	0.0000	0.0040	0.2460	0.1210	0.1140	0.1890	0.3140	0.0110	0.0000	0.0000	0.9990
Poland (South)	(131)	124	0.0000	0.0080	0.2700	0.1050	0.1170	0.2060	0.2780	0.0160	0.0000	0.0000	1.0000
Poland (South, Rzeszów)	(162)	72	0.0000	0.0139	0.1667	0.1181	0.1181	0.2083	0.2292	0.1458	0.0000	0.0000	1.0001
Poland (South, Kraków)	(162)	234	0.0000	0.0043	0.2671	0.1239	0.1004	0.2115	0.2671	0.0256	0.0000	0.0000	0.9999
Poland (South, Poronin)	(162)	70	0.0000	0.0000	0.2500	0.2429	0.1143	0.1286	0.1921	0.0714	0.0000	0.0000	0.9993
Poland (Pomerania-Kujawy region)	(93, 190)	1041	0.0000	0.0019	0.2277	0.1330	0.0999	0.1984	0.3285	0.0106	0.0000	0.0000	1.0000
Portugal (pooled) (Azores and Madeira Archipelago not included)		4639	0.0000	0.0006	0.2044	0.1696	0.1386	0.1984	0.2748	0.0128	0.0005	0.0004	1.0001
Portugal	(152)	419	0.0000	0.0000	0.2090	0.1620	0.1370	0.1820	0.3020	0.0070	0.0000	0.0000	0.9990
Portugal	(33)	153	0.0000	0.0000	0.1570	0.2030	0.1340	0.2090	0.2840	0.0130	0.0000	0.0000	1.0000
Portugal	(124)	39	0.0000	0.0000	0.2050	0.2050	0.1410	0.1670	0.2690	0.0000	0.0130	0.0000	1.0000
Portugal (Central)	(116)	114	0.0000	0.0000	0.1798	0.1667	0.1623	0.2368	0.2281	0.0263	0.0000	0.0000	1.0001
Portugal (Central)	(37, 109)	811	0.0000	0.0000	0.2160	0.1460	0.1270	0.2070	0.2950	0.0090	0.0010	0.0000	1.0001
Portugal (North, Douro river)	(213)	940	0.0000	0.0010	0.2120	0.1830	0.1380	0.1860	0.2670	0.0120	0.0000	0.0010	0.9990
Portugal (North)	(35)	319	0.0000	0.0000	0.2131	0.1567	0.1348	0.1912	0.2947	0.0094	0.0000	0.0000	1.0000
Portugal (North)	(36)	197	0.0000	0.0000	0.1932	0.1908	0.1401	0.2005	0.2560	0.0193	0.0000	0.0000	1.0000
Portugal (North)	(84)	309	0.0000	0.0000	0.1970	0.1720	0.1440	0.2070	0.2620	0.0180	0.0000	0.0000	1.0000
Portugal (North)	(98)	265	0.0000	0.0000	0.2038	0.1736	0.1434	0.2019	0.2623	0.0151	0.0000	0.0000	1.0001
Portugal (North, autochthonous)	(205)	464	0.0000	0.0010	0.2020	0.1700	0.1480	0.1970	0.2650	0.0160	0.0000	0.0010	1.0000
Portugal (North, resident)	(205)	485	0.0000	0.0010	0.1960	0.1770	0.1410	0.2070	0.2600	0.0170	0.0000	0.0010	1.0000
Portugal (South)	(34)	124	0.0000	0.0080	0.1935	0.1532	0.1452	0.2097	0.2742	0.0081	0.0081	0.0000	1.0001
Portugal (Azores) (pooled)		361	0.0000	0.0000	0.2188	0.1703	0.1512	0.1498	0.2921	0.0182	0.0000	0.0000	0.9990
Portugal (Azores)	(116)	95	0.0000	0.0000	0.2211	0.1737	0.1947	0.1211	0.2737	0.0158	0.0000	0.0000	1.0000
Portugal (Azores, S. Miguel Island)	(97)	119	0.0000	0.0000	0.2180	0.1890	0.1390	0.1600	0.2810	0.0130	0.0000	0.0000	1.0000

Portugal (Azores Archipelago)	(159)	147	0.0000	0.0000	0.2180	0.1530	0.1330	0.1600	0.3130	0.0240	0.0000	0.0000	1.0010
Portugal (Madeira Archipelago) (pooled)		206	0.0000	0.0000	0.2174	0.1619	0.1331	0.1859	0.2972	0.0048	0.0000	0.0000	1.0003
Portugal (Madeira Archipelago)	(104)	69	0.0000	0.0000	0.2070	0.1790	0.0930	0.2290	0.2860	0.0070	0.0000	0.0000	1.0010
Portugal (Madeira Archipelago)	(144)	137	0.0000	0.0000	0.2226	0.1533	0.1533	0.1642	0.3029	0.0037	0.0000	0.0000	1.0000
Romania (pooled) (without Aromuns)		272	0.0000	0.0018	0.3033	0.1177	0.1214	0.2004	0.2445	0.0110	0.0000	0.0000	1.0001
Romania (Constanta)	(166, 179)	146	0.0000	0.0034	0.2979	0.1164	0.1233	0.1815	0.2569	0.0205	0.0000	0.0000	0.9999
Romania (Ploiesti)	(179)	126	0.0000	0.0000	0.3095	0.1191	0.1191	0.2222	0.2302	0.0000	0.0000	0.0000	1.0001
Romania (Kogalniceanu, Aromuns)	(179)	99	0.0000	0.0000	0.3535	0.0909	0.1717	0.1768	0.2020	0.0050	0.0000	0.0000	0.9999
Russia (Kostroma and Kursk)	(185)	174	0.0000	0.0000	0.2529	0.1149	0.1121	0.1782	0.3333	0.0000	0.0086	0.0000	1.0000
Russia (Mari, Gorno-Marijskij, Morkinskij, Orschanskij)	(185)	225	0.0000	0.0044	0.3422	0.1889	0.1022	0.0956	0.2667	0.0000	0.0000	0.0000	1.0000
Slovakia (Bratislava)	(125)	101	0.0000	0.0000	0.2720	0.1680	0.1240	0.1780	0.2480	0.0100	0.0000	0.0000	1.0000
Slovenia (pooled)		560	0.0000	0.0009	0.2661	0.1142	0.1196	0.1821	0.3044	0.0123	0.0000	0.0000	0.9996
Slovenia	(163)	321	0.0000	0.0000	0.2617	0.1106	0.1231	0.1636	0.3271	0.0140	0.0000	0.0000	1.0001
Slovenia	(140)	239	0.0000	0.0020	0.2720	0.1190	0.1150	0.2070	0.2740	0.0100	0.0000	0.0000	0.9990
Spain (pooled) (Canary and Balearic Islands not included)		3425	0.0000	0.0010	0.2188	0.1508	0.1357	0.1993	0.2846	0.0086	0.0008	0.0000	0.9996
Spain (pooled) (Canary and Balearic Islands not included)		4037	0.0000	0.0013	0.2165	0.1524	0.1355	0.1979	0.2949		0.0013	0.0000	0.9998
Spain	(38)	205	0.0000	0.0000	0.2293	0.1585	0.1049	0.1927	0.3122	0.0024	0.0000	0.0000	1.0000
Spain	(39, 40)	244	0.0000	0.0000	0.2170	0.1760	0.1660	0.1780	0.2560	0.0060	0.0000	0.0000	0.9990
Spain	(201)	252	0.0000	0.0020	0.2460	0.1508	0.1190	0.2143	0.2579	0.0079	0.0020	0.0000	0.9999
Spain (Central)	(199)	519	0.0000	0.0017	0.1952	0.1421	0.1250	0.2380	0.2962	0.0000	0.0017	0.0000	0.9999
Spain (East, Valencia)	(170)	318	0.0000	0.0016	0.2028	0.1509	0.1698	0.1761	0.2953	0.0031	0.0000	0.0000	0.9996
Spain (South of Aragon)	(150)	100	0.0000	0.0000	0.2000	0.1500	0.1400	0.1900	0.2450	0.0750	0.0000	0.0000	1.0000
Spain (North, Navarre)	(227)	146	0.0000	0.0000	0.2500	0.1300	0.1160	0.2430	0.2570	0.0030	0.0000	0.0000	0.9990
Spain (North of Aragon)	(150)	150	0.0000	0.0000	0.2730	0.1210	0.1310	0.1450	0.3250	0.0050	0.0000	0.0000	1.0000

Spain (North, Asturias)	(138)	117	0.0000	0.0000	0.2220	0.1580	0.1750	0.1540	0.2690	0.0210	0.0000	0.0000	0.9990
Spain (North-East)	(90)	292	0.0000	0.0017	0.1952	0.1421	0.1250	0.2380	0.2962	0.0000	0.0017	0.0000	0.9999
Spain (North-East)	(42)	116	0.0000	0.0043	0.1638	0.1336	0.1595	0.2543	0.2845		0.0000	0.0000	1.0000
Spain (North-West)	(43)	234	0.0000	0.0021	0.2115	0.1731	0.1325	0.1774	0.3034		0.0000	0.0000	1.0000
Spain (South)	(41)	150	0.0000	0.0000	0.1858	0.1858	0.1588	0.1824	0.2601	0.0270	0.0000	0.0000	0.9999
Spain (South-West)	(104)	201	0.0000	0.0000	0.2363	0.1617	0.1269	0.2015	0.2662	0.0074	0.0000	0.0000	1.0000
Spain (Andalusia)	(124)	36	0.0000	0.0280	0.2220	0.1110	0.1390	0.1810	0.2920	0.0280	0.0000	0.0000	1.0010
Spain (Andalusia)*	(198)	120	0.0000	0.2160	0.1750	0.1500	0.1950	0.2330	0.0080	0.0160	0.0250	0.0000	1,0180
Spain (Cantabria)	(200)	130	0.0000	0.0000	0.1923	0.2231	0.0731	0.2038	0.2885	0.0192	0.0000	0.0000	1.0000
Spain (Catalonia)	(44)	234	0.0000	0.0000	0.2415	0.1453	0.1474	0.1987	0.2479	0.0150	0.0021	0.0021	1.0000
Spain (Catalonia, Girona province)	(124)	49	0.0000	0.0000	0.2240	0.1220	0.1020	0.1730	0.3670	0.0100	0.0000	0.0000	0.9980
Spain (Galicia)	(45)	210	0.0000	0.0020	0.2020	0.1690	0.1290	0.1830	0.3140		0.0000	0.0000	0.9990
Spain (Pyrenees)	(101)	103	0.0000	0.0000	0.2718	0.1214	0.1311	0.1456	0.3252	0.0049	0.0000	0.0000	1.0000
Spain (Valencia)	(203)	179	0.0000	0.0000	0.2095	0.1313	0.1648	0.1760	0.3184	0.0000	0.0000	0.0000	1.0000
Spain (Valencia)	(228)	52	0.0000	0.0100	0.2600	0.1350	0.1060	0.1350	0.3560		0.0000	0.0000	1.0020
Spain (Chuetas, Balearic Islands)	(228)	61	0.0000	0.0000	0.0740	0.1720	0.1890	0.2620	0.3030		0.0000	0.0000	1.0000
Spain (Ibiza, Balearic Islands)	(228)	52	0.0000	0.0000	0.1830	0.1630	0.1540	0.2210	0.2790		0.0000	0.0000	1.0000
Spain (Majorca, Balearic Islands)	(228)	52	0.0000	0.0000	0.1540	0.1540	0.1440	0.2120	0.3370		0.0000	0.0000	1.0010
Spain (Minorca, Balearic Islands)	(228)	53	0.0000	0.0090	0.1980	0.1600	0.1510	0.2740	0.2080		0.0000	0.0000	1.0000
Spain (Andalusia, Extremadura, Canary islands)	(199)	226	0.0000	0.0000	0.1881	0.1858	0.1327	0.1947	0.2677	0.0310	0.0000	0.0000	1.0000
Spain (Canary Islands)	(115)	140	0.0000	0.0000	0.2040	0.1820	0.1320	0.1930	0.2570	0.0320	0.0000	0.0000	1.0000
Sweden (pooled)		301	0.0000	0.0064	0.1694	0.1991	0.0844	0.1747	0.3590	0.0064	0.0000	0.0000	0.9994
Sweden (pooled)		883	0.0000	0.0022	0.2059	0.1888	0.0887	0.1579	0.3558		0.0006	0.0000	0.9999
Sweden	(46)	582	0.0000	0.0000	0.2247	0.1835	0.0909	0.1492	0.3508		0.0009	0.0000	1.0000
Sweden (Linköping)	(47)	67	0.0000	0.0150	0.1570	0.2310	0.0670	0.1490	0.3730	0.0080	0.0000	0.0000	1.0000
Sweden (Lund)	(47)	156	0.0000	0.0060	0.1890	0.1760	0.0860	0.1830	0.3530	0.0060	0.0000	0.0000	0.9990
Sweden (Uppsala)	(47)	78	0.0000	0.0000	0.1410	0.2180	0.0960	0.1800	0.3590	0.0060	0.0000	0.0000	1.0000
Switzerland (pooled)		511	0.0000	0.0059	0.2358	0.1790	0.1076	0.1478	0.3072	0.0166	0.0000	0.0000	0.9999

Switzerland (pooled)		708	0.0000	0.0048	0.2378	0.1754	0.1108	0.1473	0.3239		0.0000	0.0000	<i>1.0000</i>
Switzerland**	(48)	197	0.0000	0.0020	0.2430	0.1660	0.1190	0.1460	0.3240		0.0000	0.0000	<i>1.0000</i>
Switzerland	(86, 49)	100	0.0000	0.0100	0.2500	0.1850	0.1100	0.1550	0.2800	0.0100	0.0000	0.0000	<i>1.0000</i>
Switzerland (South-West)	(89)	205	0.0000	0.0049	0.2219	0.1829	0.1097	0.1488	0.3122	0.0195	0.0000	0.0000	<i>0.9999</i>
Switzerland (Bern)	(81)	206	0.0000	0.0049	0.2427	0.1723	0.1044	0.1432	0.3155	0.0170	0.0000	0.0000	<i>1.0000</i>
Turkey (pooled) (Kurds included)		1107	0.0000	0.0000	0.2802	0.1849	0.1271	0.2040	0.1782	0.0241	0.0009	0.0000	<i>0.9994</i>
Turkey (pooled) (Kurds not included)		993	0.0000	0.0000	0.2889	0.1770	0.1246	0.2058	0.1770	0.0249	0.0011	0.0000	<i>0.9993</i>
Turkey	(217)	198	0.0000	0.0000	0.2500	0.1920	0.1090	0.2530	0.1820	0.0150	0.0000	0.0000	<i>1.0010</i>
Turkey	(151)	203	0.0000	0.0000	0.2980	0.2040	0.1030	0.2190	0.1450	0.0300	0.0000	0.0000	<i>0.9990</i>
Turkey (East)	(122, 123)	54	0.0000	0.0000	0.2310	0.1760	0.1570	0.2500	0.1760	0.0090	0.0000	0.0000	<i>0.9990</i>
Turkey (North West, Marmara)	(122, 123)	74	0.0000	0.0000	0.2840	0.1890	0.1420	0.1890	0.1960	0.0000	0.0000	0.0000	<i>1.0000</i>
Turkey (South, Mediterranean)	(122, 123)	58	0.0000	0.0000	0.2670	0.1210	0.1640	0.2930	0.1290	0.0260	0.0000	0.0000	<i>1.0000</i>
Turkey (South East)	(122, 123)	61	0.0000	0.0000	0.3280	0.1800	0.1310	0.1150	0.2460	0.0000	0.0000	0.0000	<i>1.0000</i>
Turkey (West, Aegean)	(122, 123)	36	0.0000	0.0000	0.2640	0.1530	0.1250	0.1810	0.2360	0.0420	0.0000	0.0000	<i>1.0010</i>
Turkey (Central)	(122, 123)	56	0.0000	0.0000	0.2140	0.2140	0.1340	0.1700	0.2500	0.0180	0.0000	0.0000	<i>1.0000</i>
Turkey (Adana area)	(10, 50, 73, 151)	203	0.0000	0.0000	0.2980	0.2040	0.1030	0.2190	0.1450	0.0300	0.0000	0.0000	<i>0.9990</i>
Turkey (Black Sea)	(122, 123)	74	0.0000	0.0000	0.2360	0.1820	0.1550	0.2430	0.1280	0.0540	0.0000	0.0000	<i>0.9980</i>
Turkey (Laz-Turks)	(73)	174	0.0000	0.0000	0.3330	0.1180	0.1260	0.1720	0.2210	0.0230	0.0060	0.0000	<i>0.9990</i>
Turkey (Kurds)	(73)	114	0.0000	0.0000	0.2050	0.2530	0.1490	0.1880	0.1880	0.0170	0.0000	0.0000	<i>1.0000</i>
United Kingdom (pooled) (Northern Ireland not included)		2249	0.0000	0.0020	0.2444	0.1904	0.1004	0.1397	0.3235		0.0000	0.0000	<i>1.0004</i>
UK (Caucasoids)	(52)	602	0.0000	0.0020	0.2410	0.1940	0.1090	0.1400	0.3040	0.0120	0.0000	0.0000	<i>1.0020</i>
UK (Caucasoids)	(51)	200	0.0000	0.0025	0.2550	0.1675	0.0850	0.1425	0.3475		0.0000	0.0000	<i>1.0000</i>
UK (Caucasoids)	(53)	69	0.0000	0.0000	0.2200	0.2000	0.1100	0.1200	0.3400		0.0000	0.0000	<i>0.9900</i>

UK (Derbyshire)	(27)	582	0.0000	0.0009	0.2380	0.1873	0.1022	0.1418	0.3299		0.0000	0.0000	1.0001
UK (Dundee)	(27)	257	0.0000	0.0000	0.2646	0.1926	0.0895	0.1440	0.3093		0.0000	0.0000	1.0000
UK (Strathclyde)	(27)	139	0.0000	0.0072	0.2374	0.1835	0.1151	0.1403	0.3165		0.0000	0.0000	1.0000
UK (Scotland)	(54)	400	0.0000	0.0030	0.2470	0.2000	0.0930	0.1350	0.3220		0.0000	0.0000	1.0000
UK (Northern Ireland)	(27)	114	0.0000	0.0000	0.2456	0.1842	0.0877	0.1053	0.3772		0.0000	0.0000	1.0000
Yugoslavia	(211)	125	0.0000	0.0040	0.2200	0.1280	0.1640	0.2080	0.2520	0.0240	0.0000	0.0000	1.0000
America													
America (Mayas, Surui, Karitania)	(88)	30	0.0000	0.0000	0.1160	0.2500	0.0830	0.3660	0.1500	0.0330	0.0000	0.0000	0.9980
America, North													
Canada (Québec, French Canadian Caucasoids)	(78)	435	0.0000	0.0000	0.2410	0.1760	0.1200	0.1510	0.2890	0.0230	0.0010	0.0000	1.0010
Canada (North-West, Amerindians, Dogrib)	(172)	50	0.0000	0.0000	0.0200	0.5400	0.0600	0.3100	0.0700	0.0000	0.0000	0.0000	1.0000
Greenland (Inuit)	(5)	147	0.0000	0.0000	0.1090	0.6870	0.0510	0.0370	0.1160	0.0000	0.0000	0.0000	1.0000
USA (Afroamericans) (pooled)		793	0.0000	0.0038	0.1375	0.3822	0.2017	0.1400	0.1186	0.0165	0.0000	0.0000	1.0003
USA (Afroamericans)	(165)	210	0.0000	0.0000	0.1095	0.4405	0.1857	0.1452	0.1048	0.0143	0.0000	0.0000	1.0000
USA (Afroamericans)	(55)	204	0.0000	0.0050	0.1570	0.3730	0.2300	0.1250	0.0910	0.0200	0.0000	0.0000	1.0010
USA (Afroamericans)	(67)	250	0.0000	0.0060	0.1380	0.3360	0.1860	0.1640	0.1480	0.0220	0.0000	0.0000	1.0000
USA (Afroamericans)	(142)	79	0.0000	0.0000	0.1580	0.4430	0.1840	0.0570	0.1580	0.0000	0.0000	0.0000	1.0000
USA (Chicago, Afroamericans)	(129)	50	0.0000	0.0100	0.1400	0.3100	0.2600	0.1900	0.0800	0.0100	0.0000	0.0000	1.0000
USA (Caucasoids) (pooled)		765	0.0000	0.0019	0.2274	0.1711	0.1177	0.1569	0.3182	0.0066	0.0000	0.0000	0.9998
USA (Caucasoids) (pooled)		805	0.0000	0.0018	0.2291	0.1670	0.1174	0.1571	0.3267		0.0006	0.0000	0.9997
USA (Caucasoids)**	(165)	203	0.0000	0.0000	0.2266	0.1724	0.1281	0.1650	0.3054	0.0025	0.0000	0.0000	1.0000
USA (Caucasoids)	(55, 225)	209	0.0000	0.0072	0.2392	0.1411	0.1196	0.1531	0.3349	0.0048	0.0000	0.0000	0.9999
USA (Caucasoids)	(67)	204	0.0000	0.0000	0.1887	0.2059	0.1127	0.1593	0.3235	0.0098	0.0000	0.0000	0.9999
USA (Caucasoids)	(56)	40	0.0000	0.0000	0.2620	0.0880	0.1130	0.1620	0.3620		0.0130	0.0000	1.0000
USA (Maine, Caucasoids)	(134)	149	0.0000	0.0000	0.2650	0.1640	0.1070	0.1480	0.3050	0.0100	0.0000	0.0000	0.9990
USA (Hispanics) (pooled)		425	0.0000	0.0012	0.2351	0.3234	0.0811	0.1223	0.2306	0.0058	0.0000	0.0000	0.9995
USA (Hispanics)	(165)	209	0.0000	0.0024	0.2321	0.3373	0.0813	0.1029	0.2416	0.0024	0.0000	0.0000	1.0000
USA (Hispanics)	(55)	216	0.0000	0.0000	0.2380	0.3100	0.0810	0.1410	0.2200	0.0090	0.0000	0.0000	0.9990

America, Central													
Afro-Caribbean (living in UK)	(52)	190	0.0000	0.0050	0.1420	0.3840	0.2030	0.1260	0.1290	0.0110	0.0000	0.0000	<i>1.0000</i>
Bahamas (Bahamians living in USA)	(165)	158	0.0000	0.0032	0.1519	0.3798	0.2279	0.1266	0.0949	0.0158	0.0000	0.0000	<i>1.0001</i>
Costa Rica (Cabecar)	(172)	51	0.0000	0.0000	0.6770	0.1370	0.0000	0.0100	0.1770	0.0000	0.0000	0.0000	<i>1.0010</i>
Jamaica (Jamaicans living in USA)	(165)	208	0.0000	0.0024	0.1394	0.3558	0.2548	0.1587	0.0841	0.0048	0.0000	0.0000	<i>1.0000</i>
Mexico (Jalisco)	(132)	173	0.0000	0.0000	0.2830	0.3060	0.0780	0.1180	0.2020	0.0120	0.0000	0.0000	<i>0.9990</i>
Trinidad (Trinidadians living in USA)	(165)	82	0.0000	0.0061	0.1829	0.3110	0.2073	0.2073	0.0732	0.0122	0.0000	0.0000	<i>1.0000</i>
America, South													
Argentina (Caucasoids, Buenos Aires)	(87)	214	0.0000	0.0000	0.2330	0.2500	0.1050	0.1850	0.2170	0.0090	0.0000	0.0000	<i>0.9990</i>
Argentina (Buenos Aires)	(207)	117	0.0000	0.0000	0.2650	0.1367	0.0940	0.1880	0.2949	0.0214	0.0000	0.0000	<i>1.0000</i>
Argentina (Urban sample of La Plata city)	(158)	100	0.0000	0.0000	0.2600	0.2250	0.1250	0.1350	0.2250	0.0300	0.0000	0.0000	<i>1.0000</i>
Argentina (Amerindians, Mapuche) (pooled)		107	0.0000	0.0000	0.5279	0.2943	0.0095	0.0372	0.1307	0.0000	0.0000	0.0000	<i>0.9996</i>
Argentina (Amerindians, Mapuche)	(158)	50	0.0000	0.0000	0.5300	0.2900	0.0100	0.0500	0.1200	0.0000	0.0000	0.0000	<i>1.0000</i>
Argentina (Amerindians, Mapuche, Rio Negro Province)	(87)	57	0.0000	0.0000	0.5260	0.2980	0.0090	0.0260	0.1400	0.0000	0.0000	0.0000	<i>0.9990</i>
Argentina (Amerindians, Mocovi)	(158)	50	0.0000	0.0000	0.1900	0.5100	0.0600	0.0200	0.2200	0.0000	0.0000	0.0000	<i>1.0000</i>
Argentina (Amerindians, Tehuelche, Chubut Province)	(87)	28	0.0000	0.0000	0.2800	0.4300	0.0200	0.0900	0.1700	0.0000	0.0000	0.0000	<i>0.9900</i>
Argentina (Amerindians, Wichi) (pooled)		84	0.0000	0.0000	0.1300	0.7498	0.0000	0.0235	0.0943	0.0000	0.0000	0.0000	<i>0.9976</i>
Argentina (Amerindians, Wichi)	(158)	50	0.0000	0.0000	0.1300	0.7700	0.0000	0.0300	0.0700	0.0000	0.0000	0.0000	<i>1.0000</i>
Argentina (Amerindians, Wichi, Salta Province)	(87)	34	0.0000	0.0000	0.1300	0.7200	0.0000	0.0140	0.1300	0.0000	0.0000	0.0000	<i>0.9940</i>
Bolivia (Aymara) (pooled)		155	0.0000	0.0000	0.2158	0.6145	0.0000	0.0145	0.1552	0.0000	0.0000	0.0000	<i>1.0000</i>
Bolivia (Aymara)	(57)	40	0.0000	0.0000	0.2125	0.6563	0.0000	0.0188	0.1125	0.0000	0.0000	0.0000	<i>1.0001</i>
Bolivia (Aymara)	(130)	115	0.0000	0.0000	0.2170	0.6000	0.0000	0.0130	0.1700	0.0000	0.0000	0.0000	<i>1.0000</i>
Bolivia (Quechua) (pooled)		142	0.0000	0.0000	0.1759	0.5971	0.0068	0.0106	0.2094	0.0000	0.0000	0.0000	<i>0.9998</i>

Bolivia (Quetchua)	(57)	34	0.0000	0.0000	0.1470	0.6103	0.0000	0.0000	0.2426	0.0000	0.0000	0.0000	0.9999
Bolivia (Quechua, Province of Dalence, Dept. of Oruro)	(80)	108	0.0000	0.0000	0.1850	0.5930	0.0090	0.0140	0.1990	0.0000	0.0000	0.0000	1.0000
Brazil	(219)	695	0.0000	0.0000	0.2060	0.2220	0.1240	0.1760	0.2580	0.0140	0.0000	0.0000	1.0000
Brazil	(225)	423	0.0000	0.0012	0.2210	0.2199	0.1182	0.1607	0.2553	0.0225	0.0012	0.0000	1.0000
Brazil (Afro-Brazilian)	(172)	32	0.0000	0.0000	0.1250	0.4840	0.2190	0.0470	0.1250	0.0000	0.0000	0.0000	1.0000
Brazil (Caucasoids)	(172)	59	0.0000	0.0000	0.1950	0.2120	0.1020	0.1440	0.3480	0.0000	0.0000	0.0000	1.0010
Brazil (Rio de Janeiro and outskirts)	(176)	307	0.0000	0.0020	0.2380	0.2360	0.1640	0.1350	0.2250	0.0000	0.0000	0.0000	1.0000
Chile (Santiago)	(178)	70	0.0000	0.0000	0.3286	0.2571	0.0929	0.1071	0.1929	0.0214	0.0000	0.0000	1.0000
Chile (Santiago)	(188)	132	0.0000	0.0000	0.3090	0.2210	0.0760	0.0990	0.2670	0.0230	0.0040	0.0000	0.9990
Chile (South, Amerindians, Pehuenche)	(172)	51	0.0000	0.0000	0.3430	0.3330	0.0000	0.0200	0.3040	0.0000	0.0000	0.0000	1.0000
Colombia (African descent) (pooled)		421	0.0000	0.0012	0.2126	0.4050	0.1805	0.1176	0.0582	0.0250	0.0000	0.0000	1.0001
Colombia (Choco, African descent)	(210)	170	0.0000	0.0000	0.2059	0.4088	0.1705	0.1147	0.0529	0.0471	0.0000	0.0000	0.9999
Colombia (Quibdo, Condoto, Istmina, Tado, Bahia Solano, Choco department, African descent)	(196)	251	0.0000	0.0020	0.2171	0.4024	0.1873	0.1195	0.0618	0.0100	0.0000	0.0000	1.0001
Colombia (Caucasian-Mestizo) (pooled)		1109	0.0000	0.0058	0.3882	0.2273	0.0803	0.1326	0.1172	0.0487	0.0000	0.0000	1.0001
Colombia (Caucasian-Mestizo)	(153)	409	0.0000	0.0037	0.3729	0.2323	0.0905	0.1406	0.1406	0.0196	0.0000	0.0000	1.0002
Colombia (Bogotá, Caucasian Mestizo)	(210)	700	0.0000	0.0071	0.3971	0.2243	0.0743	0.1279	0.1036	0.0657	0.0000	0.0000	1.0000
Colombia (pooled)		1623	0.0000	0.0026	0.3632	0.2605	0.0832	0.1275	0.1516	0.0117	0.0003	0.0000	1.0006
Colombia (Bogotá)	(177)	123	0.0000	0.0200	0.3900	0.2200	0.0730	0.1260	0.1260	0.0450	0.0000	0.0000	1.0000
Colombia (Bogotá)	(206)	308	0.0000	0.0000	0.3366	0.2565	0.0670	0.1127	0.2124	0.0131	0.0016	0.0000	0.9999
Colombia (Barranquilla)	(206)	67	0.0000	0.0000	0.3433	0.2836	0.1045	0.1269	0.1343	0.0075	0.0000	0.0000	1.0001
Colombia (Cali)	(206)	86	0.0000	0.0000	0.3256	0.2674	0.0930	0.1163	0.1919	0.0058	0.0000	0.0000	1.0000
Colombia (Medellin)	(206)	128	0.0000	0.0000	0.3740	0.2283	0.0945	0.1339	0.1575	0.0118	0.0000	0.0000	1.0000
Colombia (Villavicencio)	(206)	48	0.0000	0.0000	0.3723	0.2234	0.0851	0.1489	0.1702	0.0000	0.0000	0.0000	0.9999
Colombia (Southwest, Valle del Cauca)	(119, 123)	863	0.0000	0.0020	0.3720	0.2720	0.0860	0.1320	0.1290	0.0080	0.0000	0.0000	1.0010
Venezuela (Maracaibo)	(214)	222	0.0000	0.0068	0.2477	0.3041	0.1329	0.1306	0.1081	0.0698	0.0000	0.0000	1.0000

Asia, South-West													
Israel (Ashkenazi)	(149)	128	0.0000	0.0000	0.2109	0.1250	0.1211	0.2578	0.2422	0.0430	0.0000	0.0000	<i>1.0000</i>
Israel (Ashkenazi)	(189)	116	0.0000	0.0000	0.2670	0.1120	0.1290	0.1850	0.2840	0.0210	0.0000	0.0000	<i>0.9980</i>
Israel (Jews of Ethiopian origin)	(149)	105	0.0000	0.0000	0.2429	0.2143	0.2333	0.2238	0.0571	0.0286	0.0000	0.0000	<i>1.0000</i>
Israel (Jews of Moroccan origin)	(149)	133	0.0000	0.0000	0.1992	0.1504	0.1090	0.3609	0.1353	0.0451	0.0000	0.0000	<i>0.9999</i>
Israel (Jews of Yemenite origin)	(149)	67	0.0000	0.0000	0.2760	0.1716	0.0970	0.2760	0.1642	0.0149	0.0000	0.0000	<i>0.9997</i>
Saudi Arabia	(148)	173	0.0000	0.0000	0.3350	0.1790	0.1010	0.2280	0.1360	0.0170	0.0030	0.0000	<i>0.9990</i>
United Arab Emirates (Abu Dhabi and Sharjah)	(174)	228	0.0000	0.0000	0.2840	0.2030	0.1460	0.2070	0.1440	0.0130	0.0020	0.0000	<i>0.9990</i>
Yemen	(76, 100)	100	0.0000	0.0000	0.2900	0.1850	0.1250	0.2350	0.1600	0.0050	0.0000	0.0000	<i>1.0000</i>
Asia, Indian Subcontinent													
India (Indians living in the United Arab Emirates: Abu Dhabi and Sharjah)	(174)	194	0.0000	0.0000	0.2820	0.1550	0.1110	0.3030	0.1370	0.0080	0.0030	0.0000	<i>0.9990</i>
India (Punjab)	(147)	125	0.0000	0.0000	0.1960	0.1640	0.0880	0.3680	0.1840	0.0000	0.0000	0.0000	<i>1.0000</i>
India (East, Brahmin)	(186)	105	0.0000	0.0205	0.2328	0.1232	0.0890	0.2123	0.1506	0.1712	0.0000	0.0000	<i>0.9996</i>
India (East, Garo)	(186)	94	0.0000	0.0000	0.0625	0.2638	0.0972	0.2083	0.3055	0.0625	0.0000	0.0000	<i>0.9998</i>
India (East, Kayastha)	(186)	125	0.0000	0.0169	0.2203	0.1440	0.0932	0.2372	0.1355	0.1525	0.0000	0.0000	<i>0.9996</i>
India (North, Brahmin)	(172)	35	0.0000	0.0000	0.2430	0.1710	0.2570	0.2000	0.1290	0.0000	0.0000	0.0000	<i>1.0000</i>
India (Northeast, Kachari)	(127, 172)	50	0.0000	0.0000	0.1500	0.3000	0.0700	0.4000	0.0800	0.0000	0.0000	0.0000	<i>1.0000</i>
India (Northeast, Meitei)	(181)	128	0.0000	0.0000	0.0850	0.2500	0.0620	0.1460	0.3740	0.0830	0.0000	0.0000	<i>1.0000</i>
India (Northeast, Kuki)	(181)	75	0.0000	0.0000	0.0200	0.2730	0.1450	0.2500	0.2500	0.0620	0.0000	0.0000	<i>1.0000</i>
India (Northeast, Naga)	(181)	78	0.0000	0.0000	0.0800	0.2600	0.0800	0.2000	0.3400	0.0400	0.0000	0.0000	<i>1.0000</i>
India (Northeast, Hmar)	(181)	60	0.0000	0.0000	0.0520	0.2700	0.1140	0.2290	0.2810	0.0520	0.0000	0.0000	<i>0.9980</i>
India (Northeast, Manipuri Muslims)	(181)	65	0.0000	0.1110	0.2220	0.0830	0.1660	0.1150	0.1940	0.0550	0.0550	0.0000	<i>1.0010</i>
India (South, Tamil)	(191)	120	0.0000	0.0000	0.2500	0.1042	0.2250	0.3541	0.0167	0.0500	0.0000	0.0000	<i>1.0000</i>
India (Aghari, Sundergarh district, Orissa)	(130)	23	0.0000	0.0000	0.2920	0.1460	0.2500	0.1460	0.1460	0.0210	0.0000	0.0000	<i>1.0010</i>
India (Bagdi, Hooghly district, West Bengal)	(130)	31	0.0000	0.0000	0.2900	0.1290	0.1290	0.3390	0.0480	0.0640	0.0000	0.0000	<i>0.9990</i>

India (Brahmin, Garhwal, Uttar Pradesh)	(130)	27	0.0000	0.0000	0.2960	0.0930	0.0740	0.2960	0.1670	0.0740	0.0000	0.0000	<i>1.0000</i>
India (Brahmin, Various locations, West Bengal)	(130)	23	0.0000	0.0000	0.3040	0.2830	0.1090	0.1520	0.0000	0.1520	0.0000	0.0000	<i>1.0000</i>
India (Charmar, Garhwal, Uttar Pradesh)	(130)	21	0.0000	0.0000	0.2620	0.0710	0.0470	0.4520	0.1430	0.0240	0.0000	0.0000	<i>0.9990</i>
India (Gaud, Sundergarh district, Orissa)	(130)	13	0.0000	0.0000	0.2860	0.2860	0.1070	0.2140	0.0360	0.0710	0.0000	0.0000	<i>1.0000</i>
India (Santal, Medinipur, West Bengal)	(130)	20	0.0000	0.0000	0.0750	0.1250	0.1250	0.6500	0.0000	0.0250	0.0000	0.0000	<i>1.0000</i>
India (Tanti, Sundergarh district, Orissa)	(130)	16	0.0000	0.0000	0.1330	0.1670	0.1330	0.4670	0.0670	0.0330	0.0000	0.0000	<i>1.0000</i>
India (Doddi, Golla caste from Chittoor district in southern Andhra Pradesh)	(226)	69	0.0000	0.0000	0.1880	0.1160	0.0800	0.4860	0.1090	0.0220	0.0000	0.0000	<i>1.0010</i>
India (Erra, Golla caste from Chittoor district in southern Andhra Pradesh)	(226)	43	0.0000	0.0000	0.3370	0.0580	0.1980	0.2910	0.1050	0.0000	0.0120	0.0000	<i>1.0010</i>
India (Karnam, Golla caste from Chittoor district in southern Andhra Pradesh)	(226)	52	0.0000	0.0000	0.2310	0.1640	0.1350	0.2980	0.1730	0.0000	0.0000	0.0000	<i>1.0010</i>
India (Pokanati, Golla caste from Chittoor district in southern Andhra Pradesh)	(226)	58	0.0000	0.0000	0.2760	0.1470	0.1300	0.3190	0.1290	0.0000	0.0000	0.0000	<i>1.0010</i>
India (Puja, Golla caste from Chittoor district in southern Andhra Pradesh)	(226)	26	0.0000	0.0000	0.2120	0.0770	0.0580	0.5190	0.1350	0.0000	0.0000	0.0000	<i>1.0010</i>
India (Punugu, Golla caste from Chittoor district in southern Andhra Pradesh)	(226)	29	0.0000	0.0000	0.2240	0.2590	0.0690	0.3620	0.0860	0.0000	0.0000	0.0000	<i>1.0000</i>
India (Kurava, Golla caste from Chittoor district in southern Andhra Pradesh)	(226)	10	0.0000	0.0000	0.5000	0.1500	0.2500	0.1000	0.0000	0.0000	0.0000	0.0000	<i>1.0000</i>
India (Bengali from east Bengal)	(193)	79	0.0000	0.0000	0.2130	0.2000	0.1440	0.3190	0.1130	0.0130	0.0000	0.0000	<i>1.0020</i>
Indo-Pakistani (living in UK)	(52)	257	0.0000	0.0000	0.2920	0.1690	0.1010	0.2670	0.1580	0.0120	0.0000	0.0000	<i>0.9990</i>
Pakistani (West Punjab)	(193)	97	0.0000	0.0000	0.2320	0.1700	0.1340	0.2890	0.1650	0.0100	0.0000	0.0000	<i>1.0000</i>
Pakistan (Lahore, Araeen subpopulation)	(167)	100	0.0000	0.0000	0.2400	0.2550	0.1050	0.2500	0.1350	0.0150	0.0000	0.0000	<i>1.0000</i>
Pakistan (Lahore, Raajpoot subpopulation)	(167)	100	0.0000	0.0000	0.3250	0.1650	0.1600	0.2150	0.1300	0.0050	0.0000	0.0000	<i>1.0000</i>

Pakistan (Pakistani living in the United Arab Emirates: Abu Dhabi and Sharjah)	(174)	197	0.0000	0.0000	0.2720	0.1830	0.1400	0.2540	0.1520	0.0000	0.0000	0.0000	<i>1.0010</i>
Asia, Far East													
Asia (Chinese, Japanese, Cambodian)	(88)	29	0.0000	0.0000	0.3270	0.5170	0.0340	0.1030	0.0170	0.0000	0.0000	0.0000	<i>0.9980</i>
Cambodia	(127)	30	0.0000	0.0000	0.1000	0.4000	0.0670	0.3170	0.1170	0.0000	0.0000	0.0000	<i>1.0010</i>
China (pooled)		2503	0.0008	0.0108	0.1212	0.2540	0.0837	0.4463	0.0410	0.0415	0.0006	0.0000	<i>0.9999</i>
China	(151, 224)	98	0.0000	0.0000	0.1070	0.2550	0.0410	0.5660	0.0260	0.0000	0.0050	0.0000	<i>1.0000</i>
China	(127)	51	0.0000	0.0000	0.1570	0.1960	0.0290	0.5200	0.0390	0.0590	0.0000	0.0000	<i>1.0000</i>
China (Changchun)	(58)	92	0.0000	0.0000	0.0600	0.2550	0.0650	0.5540	0.0440	0.0220	0.0000	0.0000	<i>1.0000</i>
China (Chengdu)	(118, 123)	128	0.0000	0.0000	0.0940	0.2890	0.0470	0.5080	0.0110	0.0510	0.0000	0.0000	<i>1.0000</i>
China (Chengdu)	(58)	121	0.0000	0.0000	0.1320	0.2560	0.0500	0.4750	0.0330	0.0540	0.0000	0.0000	<i>1.0000</i>
China Guangzhou	(145)	164	0.0000	0.0000	0.1400	0.2380	0.0240	0.4880	0.0430	0.0670	0.0000	0.0000	<i>1.0000</i>
China (Guangzhou)	(58)	101	0.0000	0.0000	0.1490	0.2230	0.0590	0.4900	0.0490	0.0300	0.0000	0.0000	<i>1.0000</i>
China (Hong Kong)	(221)	275	0.0000	0.0000	0.1000	0.3160	0.0530	0.4400	0.0290	0.0600	0.0020	0.0000	<i>1.0000</i>
China (Hong Kong)	(161)	351	0.0000	0.0000	0.1010	0.3160	0.0540	0.4440	0.0300	0.0530	0.0010	0.0000	<i>0.9990</i>
China (Shanghai)	(145)	196	0.0050	0.0000	0.1220	0.2450	0.0560	0.5100	0.0360	0.0260	0.0000	0.0000	<i>1.0000</i>
China (Yunnan)	(10)	95	0.0000	0.0000	0.0740	0.2580	0.0950	0.5100	0.0310	0.0320	0.0000	0.0000	<i>1.0000</i>
China (Shenyang)	(215)	100	0.0000	0.0200	0.1400	0.2600	0.0700	0.4200	0.0000	0.0900	0.0000	0.0000	<i>1.0000</i>
China (Shenyang)	(146)	94	0.0000	0.0000	0.1760	0.2230	0.0370	0.4840	0.0530	0.0270	0.0000	0.0000	<i>1.0000</i>
China (Xiangxi, Tujia)	(157)	50	0.0000	0.0300	0.1200	0.1400	0.0200	0.5600	0.0700	0.0600	0.0000	0.0000	<i>1.0000</i>
China (Xiangxi, Miao)	(157)	50	0.0000	0.1200	0.1900	0.0800	0.5100	0.0500	0.0500	0.0000	0.0000	0.0000	<i>1.0000</i>
China (Xiangxi, Bai)	(224)	95	0.0000	0.0000	0.0680	0.2630	0.0950	0.5100	0.0320	0.0320	0.0000	0.0000	<i>1.0000</i>
China (Xiangxi, Bai)	(157)	50	0.0000	0.1000	0.2800	0.0300	0.4900	0.0500	0.0400	0.0100	0.0000	0.0000	<i>1.0000</i>
China (Shenyang, Chaoxian)	(157)	50	0.0000	0.1200	0.2900	0.0500	0.4300	0.0300	0.0700	0.0100	0.0000	0.0000	<i>1.0000</i>
China (Han)	(172)	51	0.0000	0.0000	0.1570	0.1960	0.0290	0.5200	0.0390	0.0590	0.0000	0.0000	<i>1.0000</i>
China (Shenyang, Han)	(157)	50	0.0200	0.1300	0.2900	0.0600	0.3200	0.0700	0.0800	0.0300	0.0000	0.0000	<i>1.0000</i>
China (Dai)	(224)	99	0.0000	0.0000	0.0860	0.3330	0.0510	0.3820	0.1030	0.0450	0.0000	0.0000	<i>1.0000</i>
China (Qiang)	(224)	142	0.0000	0.0000	0.0530	0.3130	0.0560	0.4830	0.0880	0.0070	0.0000	0.0000	<i>1.0000</i>
China (Gannan area of Tibetan, Gansu province)	(195)	107	0.0000	0.0000	0.0750	0.2010	0.1310	0.4950	0.0560	0.0420	0.0000	0.0000	<i>1.0000</i>

Indonesia (Java)	(127)	28	0.0000	0.0000	0.1250	0.3390	0.1250	0.3210	0.0890	0.0000	0.0000	0.0000	0.9990
Indonesia (Sumatra, Batak)	(127)	26	0.0000	0.0000	0.0580	0.4420	0.0770	0.3080	0.1150	0.0000	0.0000	0.0000	1.0000
Japan (pooled)		2905	0.0000	0.0005	0.2304	0.2791	0.0484	0.3993	0.0326	0.0092	0.0002	0.0000	0.9997
Japan	(135)	206	0.0000	0.0000	0.1890	0.2380	0.0460	0.4850	0.0340	0.0070	0.0000	0.0000	0.9990
Japan	(60)	531	0.0000	0.0000	0.2430	0.2890	0.0490	0.3770	0.0310	0.0110	0.0000	0.0000	1.0000
Japan	(103)	176	0.0000	0.0000	0.2410	0.2900	0.0480	0.3720	0.0400	0.0090	0.0000	0.0000	1.0000
Japan	(151, 224)	138	0.0000	0.0000	0.2100	0.2750	0.0510	0.4170	0.0400	0.0070	0.0000	0.0000	1.0000
Japan	(105)	113	0.0000	0.0000	0.1900	0.2520	0.0440	0.4820	0.0270	0.0040	0.0000	0.0000	0.9990
Japan	(127)	48	0.0000	0.0000	0.2600	0.2710	0.0420	0.4060	0.0100	0.0100	0.0000	0.0000	0.9990
Japan (Gifu Prefecture)	(136, 142)	545	0.0000	0.0000	0.2420	0.2860	0.0490	0.3820	0.0310	0.0100	0.0000	0.0000	1.0000
Japan (Kanto)	(59)	200	0.0000	0.0050	0.2575	0.2525	0.0600	0.3925	0.0300	0.0025	0.0000	0.0000	1.0000
Japan (Oita area)	(184)	300	0.0000	0.0000	0.2190	0.2880	0.0430	0.3910	0.0450	0.0120	0.0020	0.0000	1.0000
Japan (Osaka)	(172)	48	0.0000	0.0000	0.2600	0.2710	0.0420	0.4060	0.0100	0.0100	0.0000	0.0000	0.9990
Japan (Shiga)	(10)	226	0.0000	0.0020	0.2270	0.2740	0.0490	0.4110	0.0340	0.0030	0.0000	0.0000	1.0000
Japan (Toyama prefecture)	(131)	105	0.0000	0.0000	0.2140	0.3190	0.0240	0.3950	0.0330	0.0140	0.0000	0.0000	1.0000
Japan (Tokyo)	(61)	150	0.0000	0.0000	0.2016	0.2984	0.0465	0.4109	0.0271	0.0155	0.0000	0.0000	1.0000
Japan (Sendai)	(146)	119	0.0000	0.0000	0.2560	0.2690	0.0710	0.3660	0.0250	0.0130	0.0000	0.0000	1.0000
Korea	(224)	20	0.0000	0.0000	0.1010	0.2760	0.2560	0.5730	0.0260	0.0000	0.0000	0.0000	1,2320
Korea (South)	(168)	500	0.0000	0.0000	0.1520	0.2500	0.0530	0.4890	0.0300	0.0240	0.0020	0.0000	1.0000
Malaysia	(127)	30	0.0000	0.0000	0.1000	0.3500	0.0330	0.3830	0.1330	0.0000	0.0000	0.0000	0.9990
Malaysia (Orang Asli)	(127)	29	0.0000	0.0170	0.0170	0.2070	0.0860	0.1900	0.4830	0.0000	0.0000	0.0000	1.0000
Philippines (pooled)		528	0.0000	0.0000	0.1299	0.2598	0.0686	0.4249	0.0540	0.0617	0.0010	0.0000	0.9999
Philippines	(128)	273	0.0000	0.0000	0.1150	0.2580	0.0730	0.4270	0.0460	0.0790	0.0020	0.0000	1.0000
Philippines	(127)	30	0.0000	0.0000	0.1000	0.2670	0.0330	0.3830	0.2170	0.0000	0.0000	0.0000	1.0000
Philippines (National Capital Region)	(156)	225	0.0000	0.0000	0.1520	0.2610	0.0680	0.4280	0.0420	0.0490	0.0000	0.0000	1.0000
Taiwan (pooled)		764	0.0000	0.0007	0.1328	0.2925	0.0543	0.4340	0.0236	0.0609	0.0013	0.0000	1.0001
Taiwan	(62)	116	0.0000	0.0000	0.1420	0.2410	0.0560	0.4830	0.0090	0.0690	0.0000	0.0000	1.0000
Taiwan	(75)	100	0.0000	0.0000	0.1700	0.2100	0.0600	0.4850	0.0150	0.0550	0.0050	0.0000	1.0000
Taiwan (Chinese)	(126, 128)	500	0.0000	0.0010	0.1250	0.3000	0.0530	0.4310	0.0230	0.0660	0.0010	0.0000	1.0000

Taiwan (Ami)	(127)	18	0.0000	0.0000	0.0000	0.5280	0.1390	0.2780	0.0560	0.0000	0.0000	0.0000	1.0010
Taiwan (Atayal)	(127)	30	0.0000	0.0000	0.1830	0.5000	0.0000	0.2170	0.1000	0.0000	0.0000	0.0000	1.0000
Thailand (pooled)		442	0.0000	0.0010	0.0980	0.3144	0.0665	0.3775	0.0814	0.0578	0.0023	0.0011	1.0000
Thailand (pooled)		552	0.0000	0.0008	0.1020	0.3125	0.0622	0.3820	0.1367		0.0028	0.0009	0.9999
Thailand	(224)	124	0.0000	0.0000	0.1080	0.3140	0.0480	0.4300	0.0400	0.0520	0.0040	0.0040	1.0000
Thailand	(164)	100	0.0000	0.0000	0.1050	0.3000	0.0550	0.4100	0.0700	0.0550	0.0050	0.0000	1.0000
Thailand	(128)	146	0.0000	0.0030	0.0990	0.3050	0.0750	0.3360	0.0890	0.0930	0.0000	0.0000	1.0000
Thailand	(110)	110	0.0000	0.0000	0.1180	0.3050	0.0450	0.4000	0.1270		0.0050	0.0000	1.0000
Thailand (North)	(127)	30	0.0000	0.0000	0.0330	0.3500	0.1170	0.3330	0.1670	0.0000	0.0000	0.0000	1.0000
Thailand (Northeast)	(127)	30	0.0000	0.0000	0.1330	0.3670	0.0830	0.2670	0.1500	0.0000	0.0000	0.0000	1.0000
Thailand (Northeast, So)	(127)	12	0.0000	0.0000	0.0000	0.3330	0.0830	0.4580	0.1250	0.0000	0.0000	0.0000	0.9990
Oceania: Australia, Melanesia, Polynesia													
Pacific (Australian Aborigines, Papua New Guineans, Nasisoi Melanesians)	(88)	30	0.0000	0.0000	0.3330	0.1500	0.2660	0.1830	0.0660	0.0000	0.0000	0.0000	0.9980
Australia (Aborigines) (pooled)		181	0.0000	0.0109	0.4394	0.2595	0.1578	0.1323	0.0000	0.0000	0.0000	0.0000	0.9999
Australia (Aborigines)	(10)	85	0.0000	0.0120	0.4410	0.2590	0.1530	0.1350	0.0000	0.0000	0.0000	0.0000	1.0000
Australia (Aborigines)	(151)	96	0.0000	0.0100	0.4380	0.2600	0.1620	0.1300	0.0000	0.0000	0.0000	0.0000	1.0000
Australia (Asian) (pooled)		194	0.0000	0.0000	0.1416	0.2679	0.0515	0.4613	0.0281	0.0440	0.0028	0.0028	1.0000
Australia (Asian)	(63)	89	0.0000	0.0000	0.1400	0.2470	0.0450	0.4830	0.0220	0.0510	0.0060	0.0060	1.0000
Australia (Asian)	(143)	105	0.0000	0.0000	0.1429	0.2857	0.0571	0.4429	0.0333	0.0381	0.0000	0.0000	1.0000
Australia (Caucasoids) (pooled)		289	0.0000	0.0053	0.2354	0.1834	0.0950	0.1712	0.2943	0.0153	0.0000	0.0000	0.9999
Australia (Caucasoids)	(143)	82	0.0000	0.0061	0.2744	0.1768	0.0976	0.1464	0.2927	0.0061	0.0000	0.0000	1.0001
Australia (Caucasoids)	(64)	207	0.0000	0.0050	0.2200	0.1860	0.0940	0.1810	0.2950	0.0190	0.0000	0.0000	1.0000
Papua New Guinea (pooled)		165	0.0000	0.0028	0.1877	0.0214	0.5850	0.1910	0.0121	0.0000	0.0000	0.0000	1.0000
Papua New Guinea	(10, 151)	114	0.0000	0.0040	0.1970	0.0310	0.4960	0.2590	0.0130	0.0000	0.0000	0.0000	1.0000
Papua New Guinea (Highlander)	(127, 172)	51	0.0000	0.0000	0.1670	0.0000	0.7840	0.0390	0.0100	0.0000	0.0000	0.0000	1.0000
Samoa	(127)	100	0.0000	0.0000	0.0700	0.4750	0.1650	0.0500	0.2350	0.0000	0.0050	0.0000	1.0000
Samoa (US-Americans)	(172)	50	0.0000	0.0000	0.0500	0.5500	0.1200	0.0700	0.2100	0.0000	0.0000	0.0000	1.0000

Samoa (West)	(172)	50	0.0000	0.0000	0.0900	0.4000	0.2100	0.0300	0.2600	0.0000	0.0100	0.0000	1.0000
Africa													
Africa (North, Maghreb)	(187)	118	0.0000	0.0000	0.2119	0.2288	0.1610	0.2966	0.0932	0.0085	0.0000	0.0000	1.0000
Africa (Mbuti and Biaka, Lisongo)	(88)	30	0.0000	0.0000	0.1330	0.3830	0.3160	0.1660	0.0000	0.0000	0.0000	0.0000	0.9980
Algeria (Mozabites from Ghardaia, Berbers)	(171)	44	0.0000	0.0000	0.1590	0.1360	0.1250	0.3750	0.1930	0.0110	0.0000	0.0000	0.9990
Cabo Verde	(94, 208)	244	0.0000	0.0000	0.1790	0.2620	0.2330	0.1790	0.1450	0.0020	0.0000	0.0000	1.0000
Benin	(172)	49	0.0000	0.0100	0.1430	0.5710	0.2040	0.0510	0.0200	0.0000	0.0000	0.0000	0.9990
Cameroon (Bamileke)	(173)	46	0.0000	0.0000	0.1300	0.5000	0.2280	0.0540	0.0760	0.0110	0.0000	0.0000	0.9990
Cameroon (Ewondo)	(173)	65	0.0000	0.0000	0.1230	0.4380	0.2380	0.1620	0.0380	0.0000	0.0000	0.0000	0.9990
Central African Republic (Sanga)	(173)	32	0.0000	0.0000	0.0630	0.4840	0.2810	0.1720	0.0000	0.0000	0.0000	0.0000	1.0000
Central African Republic (Mbenzele Pygmies)	(173)	48	0.0000	0.0000	0.0310	0.5210	0.2290	0.1770	0.0420	0.0000	0.0000	0.0000	1.0000
Egypt (pooled)		220	0.0023	0.0000	0.1970	0.2261	0.1038	0.3097	0.1334	0.0272	0.0000	0.0000	0.9995
Egypt	(76)	100	0.0050	0.0000	0.1850	0.2250	0.1000	0.2950	0.1650	0.0250	0.0000	0.0000	1.0000
Egypt (El-Minia City)	(175)	120	0.0000	0.0000	0.2070	0.2270	0.1070	0.3220	0.1070	0.0290	0.0000	0.0000	0.9990
Equatorial Guinea (Bubi population of Bioko Islands)	(223)	151	0.0000	0.0000	0.1130	0.4370	0.2610	0.1560	0.0030	0.0300	0.0000	0.0000	1.0000
Equatorial Guinea (Annobon Island, Pagalu)	(102)	81	0.0000	0.0000	0.1000	0.4530	0.2210	0.1450	0.0810	0.0000	0.0000	0.0000	1.0000
Morocco (Moroccans living in Brussels)	(10, 151)	145	0.0000	0.0000	0.1660	0.1970	0.1760	0.3410	0.1140	0.0070	0.0000	0.0000	1.0010
Morocco (Arabs) (pooled)		271	0.0000	0.0095	0.1669	0.2326	0.1524	0.2990	0.1171	0.0228	0.0000	0.0000	1.0003
Morocco (Arabic speaking)	(117)	144	0.0000	0.0110	0.1680	0.2190	0.1620	0.2780	0.1540	0.0080	0.0000	0.0000	1.0000
Morocco (Arabs)	(171)	80	0.0000	0.0060	0.1630	0.2440	0.1560	0.3250	0.0630	0.0440	0.0000	0.0000	1.0010
Morocco (Arabs)	(124)	47	0.0000	0.0110	0.1700	0.2550	0.1170	0.3190	0.0960	0.0320	0.0000	0.0000	1.0000
Morocco (Berbers) (pooled)		203	0.0000	0.0024	0.2220	0.2044	0.1872	0.2613	0.1034	0.0145	0.0048	0.0000	1.0000
Morocco (Berber speaking)	(117)	41	0.0000	0.0120	0.1710	0.2070	0.1830	0.2810	0.1460	0.0000	0.0000	0.0000	1.0000
Morocco (North and Central, Berbers)	(171)	64	0.0000	0.0000	0.2270	0.2030	0.1640	0.2660	0.1250	0.0150	0.0000	0.0000	1.0000
Morocco (Northeast, Oujda and Nador, Berbers)	(124)	50	0.0000	0.0000	0.2400	0.1900	0.1900	0.2700	0.0900	0.0100	0.0100	0.0000	1.0000
Morocco (South, Berbers)	(171)	48	0.0000	0.0000	0.2400	0.2190	0.2190	0.2290	0.0520	0.0310	0.0100	0.0000	1.0000

Mozambique	(220)	110	0.0000	0.0000	0.1270	0.3370	0.3180	0.1910	0.0270	0.0000	0.0000	0.0000	<i>1.0000</i>
Namibia (Ovambo)	(10, 151, 224)	96	0.0000	0.0000	0.0370	0.4010	0.3800	0.1510	0.0210	0.0100	0.0000	0.0000	<i>1.0000</i>
Nigeria	(172)	51	0.0000	0.0000	0.1280	0.5290	0.1570	0.1370	0.0490	0.0000	0.0000	0.0000	<i>1.0000</i>
Republic of South Africa (Cape Town, Xhosa)	(215)	96	0.0000	0.0000	0.0810	0.3760	0.3120	0.1990	0.0050	0.0270	0.0000	0.0000	<i>1.0000</i>
Sahara (Western Sahara, Saharawis)	(171)	59	0.0000	0.0000	0.1530	0.2630	0.1610	0.2970	0.1020	0.0250	0.0000	0.0000	<i>1.0010</i>
Sahara (West, El Aaium and Dakhla, native population)	(71)	103	0.0000	0.0000	0.1602	0.2767	0.1456	0.2864	0.1019	0.0291	0.0000	0.0000	<i>0.9999</i>
São Tomé e Príncipe	(65, 142, 169, 212)	327	0.0000	0.0000	0.0980	0.3490	0.3320	0.1570	0.0530	0.0110	0.0000	0.0000	<i>1.0000</i>
Uganda	(151)	82	0.0000	0.0000	0.2020	0.3170	0.1950	0.2070	0.0670	0.0120	0.0000	0.0000	<i>1.0000</i>
Zimbabwe	(66)	103	0.0000	0.0000	0.1070	0.3740	0.3250	0.1550	0.0240	0.0150	0.0000	0.0000	<i>1.0000</i>

* not included in the pooled data (sum of alleles deviates clearly from 1)

** allele 8 includes 8.3

References

- (1) Schwartz, D.W.M., Jungl, E.M., Krenek, O.R., Mayr, W.R. (1994) Typing for STR-loci by electrophoresis on rehydratable polyacrylamide gels: phenotype and allele frequencies of SE33 and TC11 in an Austrian population sample. *Adv. Forens. Haemogenet.* 5: 581-583
- (2) Ambach, E., Parson, W., Niederstätter, H., Budowle, B. (1996) Multiplex PCR and automated fluorescence detection of four tetrameric STRs in a Western Austrian population. *Adv. Forens. Haemogenet.* 6: 483-485
- (3) Alonso, S., Castro, A., Fernandez, I., Gomez de Cedron, M., Garcia-Orad, A., Meyer, E., Martinez de Pancorbo, M. (1995) Population study of 3 STR loci in the Basque Country (Northern Spain). *Int. J. Legal Med.* 107: 239-245
- (4) Kubat, M., Wiegand, P., Brinkmann, B. (1995) Population genetic study from Zagreb area using 3 STR systems. *Int. J. Legal Med.* 107: 219-221
- (5) Nellemann, L.J., Möller, A., Morling, N. (1994) PCR typing of DNA fragments of the short tandem repeat (STR) system HumTH01 in Danes and Greenland Eskimos. *Forens. Sci. Int.* 68: 45-51
- (6) Rostedt, I., Lalu, K., Lukka, M., Sajantila, A. (1996) Genotyping of five short tandem repeat loci via triplex and duplex PCR. *Forens. Sci. Int.* 82: 217-226
- (7) Pascal, O., Levayer, T., Aubert, D., Peneau, A., Markey, P., Moisan, J.P. (1994) French population data of 6 AMPFL's. *Adv. Forens. Haemogenet.* 5: 542-544
- (8) Pfitzinger, H., Ludes, B., Kintz, P., Tracqui, A., Mangin, P. (1995) French Caucasian population data for HumTH01 and HumFES/FPS short tandem repeat (STR) systems. *J. Forens. Sci.* 40: 270-274
- (9) Berschick, P., Henke, L., Henke, J. (1994) Analysis of the short tandem repeat polymorphism TC11 (HUMTH01): allele frequencies and family studies. *Adv. Forens. Haemogenet.* 5: 469-471

- (10) Brinkmann, B., Sajantila, A., Goedde, H.W., Matsumoto, H., Nishi, K., Wiegand, P. (1996) Population genetic comparisons among eight populations using allele frequency and sequence data from three microsatellite loci. *Eur. J. Hum. Genet.* 4: 175-182
- (11) Arnold, J. (1996) personal communication
- (12) Leim, K., Degenhartt, S., Reichert, W., Mattern, R. (1996) Studies on the HumTH01 and HumVWA polymorphisms in a South West German population. *Adv. Forens. Haemogenet.* 6: 566-568
- (13) Bläß, G., Jauert, B., Oesterreich, W., Ackermann, E., Pieper, A., Herrmann, S. (1996) Use of PCR in forensic casework in the area Berlin-Brandenburg: allele frequency distribution of six microsatellites. *Adv. Forens. Haemogenet.* 6: 287-289
- (14) Günther, S., Patzelt, D. (1996) Population data for the STR systems HumTH01, HumVWA and FES/FPS in a population sample from Lower Franconia. *Int. J. Legal Med.* 109: 102-103
- (15) Huckenbeck, W., Scheil, H.-G., West, S., Kanja, J., Bonte, W. (1996) Northrhine Westphalian data on the HumTH01 locus. *Anthropol. Anz.* 54: 109-116 (actualized by unpublished data)
- (16) Edelman, J. (1997) STR-Daten aus Westsachsen. 6. Frühjahrstagung - Region Nord - der Deutschen Gesellschaft für Rechtsmedizin. Poster presentation, Berlin
- (17) Haas, H., Weiler, G. (1996) Entwicklung eines Quadruplex-PCR-Systems mit den Loci HUMFESFPS, HUMTH01, HUMVWFA31 und HUMAMELX/Y zur Detektion der Amplifikate nach Polyacrylamidgelelektrophorese mittels Silberfärbung. *Rechtsmedizin* 6: 114-119
- (18) Basler, M., Rink, M. (1997) Effizienz einiger PCR-Systeme für die Identitäts- und Abstammungsbegutachtung. 6. Frühjahrstagung - Region Nord - der Deutschen Gesellschaft für Rechtsmedizin. Poster presentation, Berlin
- (19) Wiegand, P., Budowle, B., Rand, S., Brinkmann, B. (1993) Forensic validation of the STR systems SE33 and TC11. *Int. J. Legal Med.* 105: 315-318
- (20) Füredi, S., Budowle, B., Woller, J., Padar, Z. (1996) Hungarian population data on six STR loci - HUMVWFA31, HUMTH01, HUMCSF1PO, HUMFES/FPS, and HUMHPRTB - derived using multiplex PCR and manual typing, *Int. J. Legal Med.* 109: 100-101
- (21) Füredi, S., Woller, J., Padar, Z. (1995) Hungarian population data for the STR systems TH01 and VWA. *Int. J. Forens. Sci.* 108: 48-49
- (22) Woller, J., Füredi, S., Padar, Z. (1996) Hungarian population data for 11 PCR-based polymorphisms. *Adv. Forens. Haemogenet.* 6: 619-621
- (23) D'Aloja, E., Domenici, R. (1996) HumTH01 allele frequencies in Italy - report of the GEFI collaborative study. *Adv. Forens. Haemogenet.* 6: 692-694
- (24) Tagliabracci, A., Buscemi, L., Cucurachi, N., Giogetti, R., Ferrara, S.D. (1994) Suitability and efficiency of PCR systems in forensics. *Adv. Forens. Haemogenet.* 5: 387-389
- (25) D'Aloja, M., Dobosz, M., Pescarmona, M., Moschetti, A., Grimaldi, L., Pascali, V.L. (1994) Allele frequencies of three STRs in an Italian population sample. *Adv. Forens. Haemogenet.* 5: 484-486
- (26) De Stefano, F., Casarino, L., Costa, N.G., Mannucci, A., Bruni, G. (1996) Automated profiling of multiplexed DNA markers. An Italian database of four co-amplified STR-loci. *Adv. Forens. Haemogenet.* 6: 174-176
- (27) Balding, J. (1997) personal communication
- (28) Domenici, R., Nardone, M., Spinetti, I., Venturi, M., Bargagna, M., Cucurachi, N., Buscemi, L., Regazzi, E., Ferrara, S.D., Previdere, C., Peloso, G., Tagliabracci, A., Mencarelli, R. (1994) The distribution of HUMTH01 polymorphism in Northern and Central Italy. *Adv. Forens. Haemogenet.* 5: 496-498
- (29) Rose, G., De Luca, M., Falcone, E., Spadafora, P., Carrieri, G., De Benedictis, G. (1996) Allele frequency distributions at seven DNA hypervariable loci in a population sample from Calabria (Southern Italy). *Gene Geography* 10: 135-145
- (30) Sjerps, M., van der Geest, N., Pieron, C., Gajadhar, M., Kloosterman, A. (1995) A Dutch population study of the STR loci HumTH01, HumFES/FPS, HumVWA31/1 and HumF13A1, conducted for forensic purposes. *Int. J. Legal Med.* 108: 127-134
- (31) Dupuy, B.M., Berg, E.S., Olaisen, B. (1994) Four STRs in 300 Norwegians. *Adv. Forens. Haemogenet.* 5: 539-541
- (32) Pawlowski, R., Welz, A., Maciejewska, A., Paszkowska, R. (1996) Population studies of two AMPFLPs and two STRs systems in a North Polish population. *Adv. Forens. Haemogenet.* 6: 592-593

- (33) Santos, S.M.M., Budowle, B., Smerick, J.B., Keys, K.M., Moretti, T.R. (1996) Portuguese population data on the six short tandem repeat loci - CSF1PO, TPOX, TH01, D3S1358, VWA and FGA. *Forens. Sci. Int.* 83: 229-235
- (34) Espinheira, R., Geada, H., Ribeiro, T., Reys, L. (1996) STR analysis: HumTH01 and HumFES/FPS for forensic application. *Adv. Forens. Haemogenet.* 6: 528
- (35) Pinheiro, M.F., Pontes, M.L., Gené, M., Huguet, E., Pinto da Costa, J. (1996) Population study of 3 STR loci in the North of Portugal. *Adv. Forens. Haemogenet.* 6: 601-603
- (36) Amorim, A., Gusmao, L., Prata, M.J. (1996) Population and formal genetics of the STRs TPO, TH01 and VWFA31/A in North Portugal. *Adv. Forens. Haemogenet.* 6: 486-488
- (37) Souto, L., Viera, N., Corte-Real, F., Vide, M.C. (1996) Allele frequencies in 4 STRs in a population of Portugal (central area). *Adv. Forens. Haemogenet.* 6: 652-654
- (38) Cabrero, C., Díez, A., Valverde, E., Carracedo, A., Alemany, J. (1995) Allele frequency distribution of four PCR-amplified loci in the Spanish population. *Forens. Sci. Int.* 71: 153-164
- (39) Martín, P., Alonso, A., Budowle, B., Albarrán, C., García, O., Sancho, M. (1996) Spanish population data on 13 PCR-based systems. *Adv. Forens. Haemogenet.* 6: 557-559
- (40) Martín, P., Alonso, A., Budowle, B., Albarrán, C., García, O., Sancho, M. (1995) Spanish population data on 7 tetrameric short tandem repeat loci. *Int. J. Legal Med.* 108: 145-149
- (41) Andres, M.I., Prieto, V., Flores, I.C., Sanz, P. (1996) Population genetics of three STRs: TH01, CSF1PO, and TPOX in Southern Spain. *Adv. Forens. Haemogenet.* 6: 489-491
- (42) Crespillo, M., Luque, J.A., Ramírez, E., García, P., Fernandez, R.M., Valverde, J.L. (1996) Allele frequencies of four STRs (HumTH01, HumVWFA31, HumF13A01, HumFESFPS) in the North-East of Spain. *Adv. Forens. Haemogenet.* 6: 520-522
- (43) Pestoni, C., García-Rivero, A., Bellas, S., Lareu, M.V., Rodríguez-Calvo, M.S., Barros, F., Muñoz, I., Carracedo, A. (1996) Allele frequency distribution of 15 PCR-based DNA polymorphisms in the population of Galicia (NW Spain). *Adv. Forens. Haemogenet.* 6: 595-597
- (44) Gené, M., Huguet, E., Moreno, P., Sánchez, C., Carracedo, A., Corbella, J. (1996) Population study of the STRs HUMTH01 (including a new variant) and HUMVWA31A in Catalonia (Northeast Spain). *Int. J. Legal Med.* 108: 318-320
- (45) Phillips, C.P., Lareu, M.V., Lincoln, P.J., Carracedo, A., Thomson, J.A. (1994) Investigation of the STR locus HUMTH01 using PCR in Caucasian samples from England and Galicia. *Adv. Forens. Haemogenet.* 5: 554-558
- (46) Langö, A. (1995) personal communication
- (47) Holgerson, S., Karlson, J.A., Kihlgren, A., Rosen, B., Savolainen, P., Gyllensten, U. (1994) Fluorescent-based typing of the two short tandem repeat loci HumTH01 and HumACTBP2: reproducibility of size measurements and genetic variation in the Swedish population. *Electrophoresis* 15: 890-895
- (48) Kratzer, A., Gränacher, A., Jamnicki, M., Bär, W. (1994) Swiss population data for 3 STR-systems (SE33, HUMTH01, D21S11), HLA-DQa and D1S80. *Adv. Forens. Haemogenet.* 5: 515-517
- (49) Hochmeister, M.N., Jung, J.M., Budowle, B., Borer, U.V., Dirnhofer, R. (1994) Swiss population data on three tetrameric short tandem repeat loci - VWA, HUMTH01 and F13A1 - derived using multiplex PCR and laser fluorescence detection. *Int. J. Legal Med.* 107: 34-36
- (50) Alper, B., Wiegand, P., Brinkmann, B. (1995) Frequency profiles of 3 STRs in a Turkish population. *Int. J. Legal Med.* 108: 110-112
- (51) Phillips, C.P., Lareu, M.V., Lincoln, P.J., Thomson, J.A. (1995) Investigation of the STR locus HUMTH01 using PCR and agarose electrophoresis: Caucasian population survey and usefulness in paternity investigations. In: Jacob, B., Bonte, W., Huckenbeck, W. (eds.) *Advances in Forensic Sciences Vol. 6 Forensic Haemogenetics*. Köster-Verlag, Berlin: 80-84
- (52) Evett, I.W., Gill, P.D., Lambert, J.A., Oldroyd, N., Frazier, R., Watson, S., Panchal, S., Conolly, A., Kimpton, C. (1997) Statistical analysis of data from three British ethnic groups from a new STR multiplex. *Int. J. Legal Med.* 110: 5-9
- (53) Sullivan, K.M., Pope, S., Kimpton, C., Gill, P., Sutton, J. (1992) Automation of DNA profiling by fluorescent labelling of PCR products. *Adv. Forens. Haemogenet.* 4: 41-43
- (54) Lee, L.D. (1996) personal communication
- (55) Promega Corp. (1996) Technical manual Gene Print™ STR systems
- (56) Edwards, A., Hammond, H.A., Jin, L., Caskey, C.T., Chakraborty, R. (1992) Genetic variation at five trimeric and tetrameric tandem repeat loci in four human populations. *Genomics* 12: 241

- (57) Gené, M., Huguet, E., Moreno, P., Fuentes, M., Corbella, J., Mezquita, J. (1996) Aymara and Quechua Amerindian populations characterized by HumTH01 and HumVWA STR polymorphisms. *Adv. Forens. Haemogenet.* 6: 537-39
- (58) Hou, Y., Walter, H. (1996) Genetic substructure at the STR loci HumTH01 and HumVWA in Han populations, China. *Adv. Forens. Haemogenet.* 6: 468-470
- (59) Takahashi, M., Kato, Y., Miyakawa, G., Kurosu, A., Kamiyama, S. (1996) Allele detection and population study in Japanese using two STR loci (CYP19 and HUMTH01). *Int. J. Legal Med.* 108: 321-322
- (60) Nagai, A., Yamada, S., Watanabe, Y., Bunai, Y., Ohya, I. (1996) Japanese population data on six STR loci. *Adv. Forens. Haemogenet.* 6: 587-588
- (61) Nakamura, S., Sawaguchi, T., Sawaguchi, A. (1996) Forensic application of STR polymorphic markers. *Adv. Forens. Haemogenet.* 6: 589-591
- (62) Huang, N.E., Schumm, J., Budowle, B. (1995) Chinese population data on three tetrameric repeat loci - HUMTH01, TPOX, and CSF1PO - derived using multiplex PCR and manual typing. *Forens. Sci. Int.* 71: 131-136
- (63) van Oorschot, R. A.H., Gutowski, S.J., Robinson, S.L. (1994) HumTH01: amplification, species specificity, population genetics and forensic applications. *Int. J. Legal Med.* 107: 121-126
- (64) Gutowski, S., Budowle, B., Auer, J., van Oorschot, R. (1995) Statistical analysis of an Australian population for the loci Gc, HLA-DQA1, D1S80 and HUMTH01. *Forens. Sci. Int.* 76: 1-6
- (65) Prata, M.J., Amorim, A., Gusmao, L., Trovoada, M.J. (1996) Population genetics of the STRs TPO, TH01 and VWFA31/A in S. Tomé e Príncipe. *Adv. Forens. Haemogenet.* 6: 604-606
- (66) Budowle, B., Nhari, L.T., Moretti, T.R., Kanoyangwa, S.B., Masuka, E., Defenbaugh, D.A., Smerick, J.B. (1997) Zimbabwe black population data on the six short tandem repeat loci - CSF1PO, TPOX, TH01, D3S1358, VWA, and FGA. *Forens. Sci. Int.* 90: 215-221
- (67) Smith, T.A. (1997) West Virginia State Police, personal communication
- (68) Neuhuber, F., Radacher, M. (1997) A genetic study of the short tandem repeat systems VWA and TH01 in an Austrian population. *Forens. Sci. Int.* 87: 211-217
- (69) Mertens, G., Mommers, N., Heylen, H., Gielis, M., Muylle, L., Vandenberghe, A. (1997) Allele frequencies of nine STR systems in the Flemish population and application in parentage testing. *Int. J. Legal Med.* 110: 177-180
- (70) Kluß, E.-M., Röscheisen, C., Rose, M. (1998) LKA Hamburg, personal communication
- (71) Gené, M., Borrego, N., Hidalgo, R., Pinheiro, F., Luna, M., Corbella, J., Moreno, P., Huguet, E. (1998) HUMTH01, HUMVWA31A and 3'APOB VNTR-PCR loci frequencies studied in Saharan sample population (West Sahara native population). *Progr. Forensic Genet.* 7: 326-328
- (72) Schulz, S. (2000) Ph-Thesis Med. Fac. Univ. Düsseldorf
- (73) Iwasa, M., Wiegand, P., Rand, S., Schürenkamp, M., Atasoy, S., Brinkmann B. (1997) Genetic variation at five STR loci in subpopulations living in Turkey. *Int. J. Legal. Med.* 110: 170-172
- (74) Füredi, S., Angyal, M., Kozma, Z., Sétáló, Woller, J., Pádár, Z. (1997) Semi-automatic DNA profiling in a Hungarian Romany population using the STR loci HumVWFA31, HumTH01, HumTPOX, and HumCDF1PO. *Int. J. Legal Med.* 110: 184-187
- (75) Lee, J.C.-I., Chen, C.H., Tsai, L.-C., Linacre, A., Chang, J.G. (1997) The screening of 13 short tandem repeat loci in the Chinese population. *Forens. Sci. Int.* 87: 137-144
- (76) Klintschar, M., Kozma, Z., Al Hammadi, N., Abdull Fatah, M., Nöhammer, C. (1998) A study on the short tandem repeat systems HumCD4, HumTH01 and HumFIBRA in population samples from Yemen and Egypt. *Int. J. Legal Med.* 111: 107-109
- (77) Garcia, O., Martin, P., Budowle, B., Uriarte, J., Albarran, C., Alonso, A. (1998) Basque Country autochthonous population data on 7 short tandem repeat loci. *Int. J. Legal Med.* 111: 162-164
- (78) Busque, L., Desmarais, D., Provost, S., Schumm, J.W., Zhong, Y., Chakraborty, R. (1997) Analysis of allele distribution for six short tandem repeat loci in the French Canadian population of Québec. *J. Forens. Sci.* 42: 1147-1153
- (79) Stein, C. (1998) Institut für Rechtsmedizin, Essen, personal communication

- (80) Gené, M., Fuentes, M., Huguet, E., Piqué, E., Bert, F., Corella, A., P#erez-Pérez, A., Corbella, J., Moreno, P. (1998) Quechua Amerindian population characterized by HLA-DQa, YNZ22, 3'APO B, HUMTH01, and HUMVWA31A polymorphisms. *J. Forens. Sci.* 43: 403-405
- (81) Gehrig, C. (1998) Institut für Rechtsmedizin, Bern, personal communication
- (82) Madea, B., Junge, A. (1998) Institut für Rechtsmedizin, Bonn, personal communication
- (83) Weisser, H.-J., Lutz, S. (1998) Institut für Rechtsmedizin, Freiburg, personal communication
- (84) Pereira, L., Gusmão, L., Amorim, A., Prata, M.J., Silva, F., Bessa, I., Santos, M.T. (1996) Population and segregation data on the STRs CD4, FES/FPS, MBP (Locus B), TH01, TP53, TPO and vWA31/A in North Portugal. *Proc. 7th Int. Symp. Human Identification. Promega Corp.*, 193
- (85) Bulnheim, U., Hammer, U., Wegener, R., Meissner, D., Karstädt, G. (1998) Institut für Rechtsmedizin, Rostock, personal communication
- (86) Hochmeister, M.N., Budowle, B., Schumm, J.W., Sprecher, C.J., Borer, U.V., Dirrhofer, R. (1995) Swiss population data and forensic efficiency values on 3 tetrameric short tandem repeat loci - HUMTH01, TPOX, and CSF1PO - derived using a STR multiplex system. *Int. J. Legal Med.* 107: 246-249
- (cf. reference 49: Hochmeister et al., 1994)
- (87) Sala, A., Penacino, G., Corach, D. (1998) Comparison of allele frequencies of eight STR loci from Argentinian Amerindian and European populations. *Hum. Biol.* 70: 937-947
- (88) Pérez-Lezaun, A., Calafell, F., Mateu, E., Comas, D., Bosch, E., Bertranpetit, J. (1997) Allele frequencies for 20 microsatellites in a worldwide population survey. *Hum. Hered.* 47: 189-196
- (89) Grange, F., Dimo-Simonin, N., Brandt-Casadevall, C. (1995) HUMTH01 (TC11) and HUMFES/FPS (FES) alleles distribution in a South West Swiss population. *Acta Med. Leg.* 44: 28-31
- (90) Crespillo, M., Luque, J.A., Fernández, R., Ramírez, E., García, P., Valverde, J.L. (1997) Allele frequency distributions of 13 PCR-based systems in a population from North-East Spain. *Int. J. Legal Med.* 110: 223-225
- (91) Ambach, E., Parson, W., Niederstätter, H., Budowle, B. (1997) Austrian Caucasian population data for the quadruplex plus amelogenin: Refined mutation rate for HumvWFA31/A. *J. Forens. Sci.* 42: 1136-1139
- (92) Meyer, E., Hädrich, C., Hendrich, F.-I. (1998) Institut für Rechtsmedizin, Jena, personal communication
- (93) Miscicka-Sliwka, Czarny, J., Grzybowski, T., Wozniak, M. (1998) Population genetics of 14 STRs: vWA, TH01, TPOX, CSF1PO, D5S818, D13S317, D7S820, D16S539, F13A01, FESFPS, F13B, LPL, D3S1358 and FGA in the Pomerania-Kujawy region of Poland. *Progr. Forensic Genet.* 7: 261-263
- (94) Dios, S., Luis, J.R., Caeiro, B., Teixeira Ribeiro, J.C. (1998) TPOX, HUMVWA31/A, HUMTH01, CYP19, D5S373, D8S323, D8S344, D8S345: STR database for a West African population. *Progr. Forensic Genet.* 7: 267-269
- (95) Förster, R., Bäßler, G., Pflug, W., Schnee-Griese, J., Uhl, S. (1998) Allele frequencies (HUMVWA, HUMTH01 and HUMFES/FPS) in a populaton sample of South-West Germany. *Progr. Forensic Genet.* 7: 278-281
- (96) Gessa, S., Carcassi, C., Floris, L., Paribello, F., Lai, S., Dermontis, R., Alba, F., Montaldo, S., Contu, L. (1998) Sardinian population data on STR locus HUMTH01. *Progr. Forensic Genet.* 7: 288-290
- (97) Prata, M.J., Gusmão, L., Mota, P., Silva, D., Amorim, A. (1998) Genetic profiling of S. Miguel island (Azores). *Progr. Forensic Genet.* 7: 294-296
- (98) Gusmão, L., Prata, M.J., Amorim, A., Silva, F., Bessa, I. (1997) Characterization of four short tandem repeat loci (TH01, VWA31/A, CD4 and TP 53) in Northern Portugal. *Hum. Biol.* 69: 31-40
- (99) Szabo, A., Schürenkamp, M., Hühne, J. (1998) Hungarian population data for six STR loci. *Int. J. Legal Med.* 111:49-51
- (100) Klintschar, M., Al Hammadi, N. (1998) A study on five short tandem repeat systems in a Yemenian population sample. *Progr. Forensic Genet.* 7: 300-302
- (101) Martínez-Jarreta, B., Diaz Roche, P., Budowle, B., Abecia, E., Castellano, M., Casalod, Y. (1998) Pyrenean population data on 3 tetrameric short tandem repeat loci - HUMTH01, TPOX and CSF1PO-derived using a STR multiplex system. *Progr. Forensic Genet.* 7: 312-314

- (102) Huguet, E., Borrego, N., Pinheiro, M.F., Luna, M., Corbella, J., Mas, J., Gené, M., Moreno, P. (1998) Annobon Island population (Equatorial Guinea) characterized by five VNTRs-PCR polymorphisms. *Progr. Forensic Genet.* 7: 329-331
- (103) Yoshida, K., Kasai, K., Sato, H., Brenner, C.H., Sensabaugh, G.F. (1998) Genetic variation at 6 STR loci in the Japanese population. *Progr. Forensic Genet.* 7: 360-362
- (104) Gamero, J.J., Souto, L., Vieira, D.N., Vizcaya, M.A., Arufe, M.I., Feliú, M.M., Vide, M.C., Romero, J.L. (1998) Population study of the HUMVWA, HUMTH01, HUMFES and HUMF13A1 STR polymorphisms in the South-West of Spain. *Progr. Forensic Genet.* 7: 366-368
- (105) Yamamoto, T., Uchihi, R., Nozawa, H., Huang, X.L., Leong, Y.K., Tanaka, M., Mizutani, M., Tamaki, K., Katsumata, Y. (1998) Polymorphism analysis of nine STR loci in Japanese using multiplex PCR and capillary electrophoresis. *Progr. Forensic Genet.* 7: 390-391
- (106) Cerri, N., Decarli, A., Zorzi, F., De Ferrari, F. (1998) A statistical analysis by means linear model on Italian STRs population data. *Progr. Forensic Genet.* 7: 559-561
- (107) Degenhartt, S., Leim, K., Clerici, S., Reichert, W., Mattern, R. (1998) Studies on 7 autosomal and 5 Y-chromosomal STR loci in a South-West German population. *Progr. Forensic Genet.* 7: 527-530
- (108) Cremer, U., Scheil, H.-G., Schiwy-Bochat, K.-H., Schürfeld, K., Althoff, H. (1998): Populationsgenetische Studie der PCR-VNTR-Systeme TH01, FES, F13B und CD4. Poster presentation at the 77. Jahrestagung Dtsch. Ges. Rechtsmed. Hannover, 15.-19.09.1998
- (109) Souto, L., Amorim, A., Vide, M.C. (1998) Population and segregation data on the multiplex system (TH01, VWA, FES, F13A1) from Central Portugal. *Progr. Forensic Genet.* 7: 363-365
- (110) Bhoopat, T., Sriduangkaew, S., Steger, H.F. (1997) An investigation of the TH01 locus in a population from northern Thailand. *Int. J. Legal Med.* 110: 286-287
- (111) Aaspõllu, A., Sumeri, I., Kelve, M. (2000) Allele distribution at nine STR loci - D3S1358, vWA, FGA, TH01, TPOX, CSF1PO, D5S818, D13S317 and D7S820 - in the Estonian population. *Progr. Forensic Genet.* 8: 129-131
- (112) Domenici, R., Fornaciari, S., Nardone, M., Rocchi, A., Spinetti, I., Venturi, M., Presciuttini, S. (2000) Allele frequencies of the HUMTH01, HUMVWA31/A, HUMFES/FPS, HUMF13A1 loci in Tuscany (Italy). *Progr. Forensic Genet.* 8: 164-166
- (113) Robino, C., Gino, S., Torre, C. (2000) Allele and genotype frequencies of two STR loci (HUMTH01, HUMVWA) in the Northwest Italian population. *Progr. Forensic Genet.* 8: 175-177
- (114) Cossutta, F., Perossa, R., Frassanito, F., Altamura, B.M., Fattorini, P. (2000) Population genetics of fourteen STR loci in North-East Italy. *Progr. Forensic Genet.* 8: 178-180
- (115) Frías, I., Torres, Y., Solá, D., Hernández, A., Prieto, V., Flores, I., Sanz, P. (2000) Allele frequency distribution of seven STRs in a Canary Islands population (Spain). *Progr. Forensic Genet.* 8: 202-204
- (116) Anjos, M.J., Carvalho, M., Andrade, L., Corte-Real, F., Vieira, D.N., Vide, M.C. (2000) Allele frequencies of STR multiplex systems in two Portuguese population samples. *Progr. Forensic Genet.* 8: 208-211
- (117) Brandt-Casadevall, C., Taroni, F., Dimo-Simonin, N., Baala, L., Sefiani, A., Mangin, P. (2000) Moroccan population alleles frequency on 9 PCR-based loci. *Progr. Forensic Genet.* 8: 221-223
- (118) Hou, Y., Li, Y., Wu, J., Tang, J., Prinz, M. (2000) Polymorphisms of 13 STR markers in Chinese population. *Progr. Forensic Genet.* 8: 242-244
- (119) Gómez, M.V., Reyes, M.E., Mejía, D.F., Cárdenas, H. (2000) Genetic variation at 9 STR loci in a southwestern Colombian population. *Progr. Forensic Genet.* 8: 251-253
- (120) Sippel, H., Hedman, M., Sajantila, A. (2000) DNA-database in the Finnish population using AmpF/STR profiler and AmpF/STR SGM Plus multiplex analysis by capillary electrophoresis. *Progr. Forensic Genet.* 8: 132-135
- (121) Brdicka, R., Siegllová, Z., Loudová, M. (2000) The short history of DNA analyses used for solving paternity cases and establishing external quality assessment in the Czech Republic. *Progr. Forensic Genet.* 8: 612
- (122) Decorte, R., Müslümanoğlu, M.H., Mahieu, F., Gilissen, A., Cilingir, O., Ataman, C., Artan, S., Xiao, F.-X., Basaran, N., Cassiman, J.-J. (2000) STR (autosomal and Y-chromosomal) analysis reveals geographic differences in the Turkish population. *Progr. Forensic Genet.* 8: 215-217
- (123) Brenner, C.H. (2000) Summary of polymorphic STR allele frequencies and Y chromosome haplotype frequencies. *Progr. Forensic Genet.* 8: 109-125

- (124) Pérez-Lezaun, A., Calafell, F., Clarimón, J., Bosch, E., Mateu, E., Gusmão, L., Amorim, A., Benchemsi, N., Bertranpetit, J. (2000) Allele frequencies of 13 short tandem repeats in population samples from the Iberian Peninsula and Northern Africa. *Int. J. Legal Med.* 113: 208-214
- (125) Hou, Y., Mielke, A., Mulcahy-Schröder, M., Prinz, M., Siváková, D., Walter, H. (1998) Genetic variation at the short tandem repeat loci HUMTH01 and HUMVWA31 within and between German and Slovak populations. *Anthropologie* XXXVI/3: 255-259
- (126) Pu, C.-E., Wu, F.-C., Cheng, C.-Li., Wu, K.C., Chao, C.H., Li, J.-M. (1998) DNA short tandem repeat profiling of Chinese population in Taiwan determined by using an automated sequencer. *Forens. Sci. Int.* 97: 47-51
- (127) Parra, E., Saha, N., Soemantri, A.G., Mcgarvey, S.T., Hundrieser, J., Shriver, M.D., Deka, R. (1999) Genetic variation at 9 autosomal microsatellite loci in Asian and Pacific populations. *Hum. Biol.* 71: 757-779
- (128) Pu, C.-E., H.C.-M., Chen, M.-Y., Wu, F.-C., Sun, C.-F. (1999) Genetic variation at nine STR loci in populations from the Philippines and Thailand living in Taiwan. *Forensic Sci. Int.* 106: 1-6
- (129) Destro-Bisol, G., Maviglia, R., Caglià, A., Bosci, I., Spedini, G., Pascali, V., Clark, A., Tishkoff, S. (1999) Estimating European admixture in African Americans by using microsatellites and a microsatellite haplotype (CD4/Alu). *Hum. Genet.* 104: 149-157
- (130) Gené, M., Moreno, P., Borrego, N., Piqué, E., Xifró, A., Fuentes, M., Bert, F., Corella, A., Pérez-Pérez, A., Turbón, D., Corbella, J., Huguet, E. (2000) Population study of Aymara Amerindians for the PCR-DNA polymorphisms HUMTH01, HUMVWA31A, D3S1358, D8S1179, D18S51, D19S253, YNZ22 and HLA-DQa. *Int. J. Legal Med.* 113: 126-128
- (131) Turowska, B., Sanak, M. (2000) Frequency data on the loci vWA, FES/FPS, F13A01, TH01, TPOX and CSF1PO in a population from South Poland. *Int. J. Legal Med.* 113: 123-125
- (132) Rangel-Villalobos, H., Rivas, F., Torres-Rodríguez, M., Jaloma-Cruz, A.R., Gallegos-Arreola, M.P., López-Satow, J., Cantú, J.M., Figuera, L.E. (1999) Allele frequency distributions of six Amp-FLPS (D1S80, APO-B, VWA, TH01, CSF1PO and HPRTB) in a Mexican population. *Forensic Sci. Int.* 105: 125-129
- (133) Garofano, L., Pizzamiglio, M., Vecchio, C., Lago, G., Floris, T., D'Errico, G., Brembilla, G., Romano, A., Budowle, B. (1998) Italian population data on thirteen short tandem repeat loci: HUMTH01, D21S11, D18S51, HUMVWFA31, HUMFIBRA, D8S1179, HUMTPOX, HUMCSF1PO, D16S539, D7S820, D13S317, D5S818, D3S1358. *Forensic Sci. Int.* 97: 53-60
- (134) Kupferschmid, T.D., Calicchio, T., Budowle, B. (1999) Maine Caucasian population DNA database using twelve short tandem repeat loci. *J. Forensic Sci.* 44: 392-295
- (135) Yamamoto, T., Uchihi, R., Nozawa, H., Huang, X.-L., Leong, Y.-K., Tanaka, M., Mizutani, M., Tamaki, K., Katsumata, Y. (1999) Allele distribution at nine STR loci - D3S1358, vWA, FGA, TH01, TPOX, CSF1PO, D5S818, D13S317 and D7S820 - in the Japanese population by multiplex PCR and Capillary electrophoresis. *J. Forensic Sci.* 44: 167-170
- (136) Nagai, A., Yamada, S., Watanabe, Y., Bunai, Y., Ohya, I. (1996) Analysis of the STR loci HUMF13A01, HUMFXIIB, HUMLIPOL, HUMTH01, HUMTPOX and HUMVWFA31 in a Japanese population. *Int. J. Legal Med.* 109: 34-36
- (137) Hantschel, M., Hausmann, R., Lederer, T., Martus, P., Betz, P. (1999) Population genetics of nine short tandem repeat (STR) loci - DNA typing using the AmpF/STR Profiler PCR amplification kit. *Int. J. Legal Med.* 112: 393-395
- (138) Marco, P.N., Martínez-Jarreta, B., Martínez, E.A., Sanchis, A.P., Fonseca, R.H. (1999) Allele frequency distribution of the STR loci HUMTPOX, HUMTH01 and HUMVWA in Asturias (North Spain). *J. Forensic Sci.* 44: 389-391
- (139) De Pancorbo, M.M., Castro, A., Fernández-Fernández, I., García-Orad, A. (1998) Population genetics and forensic applications using multiplex PCR (CSF1PO, TPOX, and TH01) loci in the Basque Country. *J. Forensic Sci.* 43: 1181-1187
- (140) Zupanic, I., Balazic, J., Komel, R. (1998) Analysis of nine short tandem repeat (STR) loci in the Slovenian population. *Int. J. Legal Med.* 111: 248-250
- (141) Garofano, L., Lago, G., Vecchio, C., Pizzamiglio, M., Zanon, C., Virgili, A., Albonici, L., Manzari, V., Budowle, B. (1998) Italian population data on the polymarker system and on the five short tandem repeat loci CSF1PO, TPOX, TH01, F13B, and vWA. *J. Forensic Sci.* 43: 837-840
- (142) Pörtl, R., Luckenbach, C., Hixson, J., Ritter, H. (1998) The short tandem repeat loci hTPO, TH01 and FGA. *Hum. Hered.* 48: 318-324
- (143) Wilson-Wilde, L.M., van Oorschot, R.A.H., Mitchell, R.J. (1997) Genetic diversity at six short tandem repeat loci within the state of Victoria, Australia. *Electrophoresis* 18: 1592-1597
- (144) Corte-Real, F., Souto, Luis, Anjos, M.J., Carvalho, M., Vieira, D.N., Carracedo, A., Vide, M.C. (1999) Population distribution of six PCR-amplified loci in Madeira Archipelago (Portugal). *Forens. Sci. Int.* 100: 93-99

- (145) Xiao, F.-X., Gilissen, A., Gu, X.-X., Cassiman, J.-J., Decorte, R. (1998) Genetic data obtained for two Chinese Han populations with a quadruplex fluorescent STR typing system (HUMVWA, HUMTH01, D21S11 and HPRT). *Int. J. Legal Med.* 111: 343-345
- (146) Nata, M., Kimura, T., Hashiyada, M., He, P., Yan, W., Li, X., Funayama, M., Sagisaka, K. (1999) Allele frequencies of eight STRs in Japanese and Chinese. *Int. J. Legal Med.* 112: 396-399
- (147) Watson, E.C., Gill, P., Mastana, S.S. (1998) Genetic diversity at the HUMTH01 locus. *Ann. Hum. Biol.* 25: 563-580
- (148) Sinha, S., Amjad, M., Rogers, C., Hamby, J.E., Tahir, U.A., Balamurugan, K., Al-Kubaidan, N.A., Choudhry, A.R., Budowle, B., Tahir, M.A. (1999) Typing of eight short tandem repeat (STR) loci in a Saudi Arabian population. *Forensic Sci. Int.* 104: 143-146
- (149) Amar, A., Brautbar, C., Motro, U., Fisher, T., Bonne-Tamir, B., Israel, S. (1999) Genetic variation of three tetrameric tandem repeats in four distinct Israeli ethnic groups. *J. Forensic Sci.* 44: 983-986
- (150) Martinez Jarreta, B., Diaz Roche, P., Abecia, E. (1999) Genetic variation at six STR loci (HUMTH01, HUMTPOX, HUMCSF1PO, HUMF13A01, HUMFES/FPS, HUMVWA31) in Aragon (North Spain). *Forensic Sci. Int.* 100: 87-92
- (151) Brinkmann, B., Junge, A., Meyer, E., Wiegand, P. (1998) Population genetic diversity in relation to microsatellite heterogeneity. *Hum. Mutation* 11: 135-144
- (152) Asmundo, A., Crinò, C. (1998) Population study of the short tandem repeat polymorphisms HumTH01, HumVWA31, HumFESFPS and HumF13A1 in Sicily (Southern Italy). *Int. J. Legal Med.* 111: 281-283
- (153) Yunis, J.J., Garcia, O., Uriarte, I., Yunis, E.J. (2000) Population data on 6 short tandem repeat loci in a sample of Caucasian-Mestizos from Colombia. *Int. J. Legal Med.* 113: 175-178
- (154) Martinovic, I., Barac, L., Furac, I., Janicijevic, B., Kubat, M., Pericic, M., Vidovic, B., Rudan, P. (1999) STR polymorphisms in the population of the island of Hvar. *Hum. Biol.* 71: 341-352
- (155) Pawlowski, R., Maciejewska, A., Paszkowska, R., Welz, A. (1997) Frequencies for five short tandem repeat (STR) systems in a population from North Poland. *Int. J. Legal Med.* 110: 10-13
- (156) Halos, S.C., Chu, J.Y., Ferreon, A.C.M., Magno, M.M.F. (1999) Philippine population database at nine microsatellite loci for forensic and paternity applications. *Forensic Sci. Int.* 101: 27-32
- (157) Lin, Z., Ohshima, T., Gao, S., Kondo, T., Takayasu, T., Sato, Y., Sun, K. (2000) Genetic variation and relationships at five STR loci in five distinct ethnic groups in China. *Forensic Sci. Int.* 112:179-189
- (158) Turret, N., López Gamelo, J., Vidal-Rioja, L. (1999) Allele frequencies of six STR loci in Argentine populations. *J. Forensic Sci.* 44: 1265-1269
- (159) Corte-Real, F., Souto, L., Anjos, M.J., Carvalho, M., Vieira, D.N., Carracedo, A., Vide, M.C. (1999) Population study of HUMTH01, HUMVWA31/A, HUMF13A1 and HUMFES/FPS systems in Azores. *J. Forensic Sci.* 44: 1261-1264
- (160) Maviglia, R., Dobosz, M., Boschi, I., Caglià, A., Hall, D., Capelli, C., d'Aloja, E., Pescarmona, M., Moscetti, A., Pascali, V.L., Destro-Bisol, G. (2000) A repository of 14 PCR-loci Italian gene frequencies in the world wide web. *Forensic Sci. Int.* 115: 99-101
- (161) Law, M.Y., Wong, D.M., Fung, W.K., Chan, K.L., Li, C., Lun, T.S., Lai, K.M., Cheung, K.Y., Chiu, C.T. (2000) Genetic polymorphism at three STR loci - CSF1PO, HUMTH01 and TPOX, and the AMP-FLP locus D1S80 for the Chinese population in Hong Kong. *Forensic Sci. Int.* 115: 103-105
- (162) Wolanska-Nowak, P. (2000) Application of subpopulation theory to evaluation of DNA evidence. *Forensic Sci. Int.* 113: 63-69
- (163) Drobic, K., Regent, A., Budowle, B. (2001) STR data for the AmpFISTR SGM *plus* from Slovenia. *Forensic Sci. Int.* 115: 107-109
- (164) Chantratita, W., Rerkamnuaychoke, B., Jomsawat, U., Thanakitgosate, J., Ruangvithayanon, T., Rojanasunan, P. (2001) Thai population data on nine tetrameric STR loci - D3S1358, vWA, FGA, TH01, TPOX, CSF1PO, D5S818, D13S317 and D7S820. *Forensic Sci. Int.* 115: 113-115
- (165) Budowle, B., Moretti, T.R., Baumstark, A.L., Defenbaugh, D.A., Keys, K.M. (1999) Population data on the thirteen CODIS Core Short Tandem Repeat Loci in African Americans, U.S. Caucasians, Hispanics, Bahamians, Jamaicans, and Trinidadians. *J. Forensic Sci.* 44: 1277-1286
- (166) Huckenbeck, W., Schmidt, H.D., Scheil, H.-G., Scheffrahn, W. (2000) DNA-PCR systems TH01 and VWA31: Population data from Albania and Rumania. *Anthrop. Anz.* 58: 171-176
- (167) Rahman, Z., Afroze, T., Weir, B.S. (2001) DNA typing results from two urban subpopulations of Pakistan. *J. Forensic Sci.* 46: 111-115

- (168) Han, M.S., Kang, P.W., Choi, D.H., Lee, Y.H., Choi, S.K., Kim, W. (2001) Genetic variation at eight STR loci in the Korean population. *Forensic Sci. Int.* 116: 35-36
- (169) Gusmão, L., Prata, M.J., Miranda, C., de Jesus Trovoada, M., Amorim, A. (2001) STR data from S. Tomé e Príncipe (Gulf of Guinea, West Africa) *Forensic Sci. Int.* 116: 53-54
- (170) Aler, M., Salas, A., Gisbert, M., Carracedo, A. (2001) Data for nine autosomal STRs markers from Valencia (east mediterranean coast of the Iberian Peninsula). *Forensic Sci. Int.* 116: 37-39
- (171) Bosch, E., Clarimón, J., Pérez-Lezaun, A., Calafell, F. (2001) STR data for 21 loci in northwestern Africa. *Forensic Sci. Int.* 116: 41-51
- (172) Deka, R., Shriver, M.D., Yu, L.M., Mueller Heideich, E., Jin, L., Zhong, Y., McGarvey, S.T., Swarup Agarwal, S., Bunker, C.H., Miki, T., Hundrieser, J., Yin, S.-J., Raskin, S., Barrantes, R., Ferrell, R.E., Chakraborty, R. (1999) Genetic variation at twentythree microsatellite loci in sixteen human populations. *J. Genet.* 78: 99-121
- (173) Destro-Bisol, G., Boschi, I., Caglià, A., Tofanelli, S., Pascali, V., Paoli, G., Spedini, G. (2000) Microsatellite Variation in Central Africa: An analysis of intrapopulation and interpopulation genetic diversity. *Am. J. Phys. Anthropol.* 112: 319-337
- (174) Mohammed, A.A.A., Linacre, A.M.T., Vanezis, P., Goodwin, W. (2001) STR data for the GenePrint[®] PowerPlex[®] 1.2 system loci from three United Arab Emirates populations. *Forensic Sci. Int.* 119: 328-329
- (175) Ahmed, A., Linacre, A.M.T., Mohammed, A.A.A., Vanezis, P., Goodwin, W. (2001) STR population data for 10 STR loci including the GenePrint[™] PowerPlex[™] 1.2 kit from El-Minia (Central Egypt). *Forensic Sci. Int.* 117: 233-234
- (176) Barros de Castro, I.A., Rinzler, C.M.C., Rumjanek, F.D. (2000) Allele Frequency Distributions for Twelve STR Loci in a Brazilian Population. *J. Forensic Sci.* 45:941
- (177) Duran, R., Ruiz-García, M. (2001) Genetic Population History Relationships of the Population of Bogotá, Colombia, by Using the D1S80, VWA, and TH01 Molecular Markers. *Am. J. Hum. Biol.* 13:374-383
- (178) Figueroa, C.C., Acuña, M., Cifuentes, L. (2000) Gene frequencies for six STR loci in a Chilean population of mixed ancestry. *J. Forensic Sci.* 45: 742-743
- (179) Huckenbeck, W., Scheil, H.-G., Schmidt, H.D., Efremovska, L., Xirotiris, N. (2001) Population genetic studies in the Balkans. II. DNA-STR-systems. *Anthrop. Anz.* 59: 213-225
- (180) Martinovic Klaric, I., Barac, L., Bukovic, D., Furac, I., Geber, G., Janicijevic, B., Kubat, M., Pericic, M., Vidovic, B., Rudan, P. (2000) STR polymorphisms in the population of the island of Brac, Croatia. *Homo* 51: 141-150
- (181) Ranjan, D., Kashyap, V.K. (2001) Genetic variation observed at three tetrameric short tandem repeat loci HumTH01, TPOX, and CSF1PO - in five ethnic population groups of Northeastern India. *Am. J. Hum. Biol.* 13: 23-29
- (182) Ross, J., Parson, W., Furac, I., Kubat, M., Holland, M. (2001) Multiplex PCR amplification of eight STR loci in Austrian and Croatian Caucasian populations. *Int. J. Legal Med.* 115: 57-60
- (183) Scheil, H.-G., Huckenbeck, W., Schuhen, S., Schulz, S. (2001) Genetische Studien im Regierungsbezirk Köln (Nordrhein-Westfalen, Deutschland): DNA-STR-Systeme FGA, TH01, VWA und YNZ22. *Anthrop. Anz.* 59: 233-242
- (184) Wang, W., Fukuda, M., Kishida, T., Tamaki, Y. (1996) Quintuplex PCR-Amplification of Microsatellites. *Jpn. J. Legal Med.* 50: 231-236
- (185) Heutling, D. (2000) Untersuchungen zur Variabilität ausgewählter Serumprotein- und DNA-Polymorphismen in osteuropäischen Populationen, Diss. Med. Fak. Magdeburg
- (186) Dutta, R., Kashyap, V.K. (2001) Allele frequency of six STR loci among three predominant population groups of eastern India. *Forensic Sci. Int.* 119: 129-130
- (187) Farfán, M.J., Prieto, V., Torres, Y., López-Soto, M., Sanz, P. (2001) STR data for the Amp *F*/STR Profiler Plus and COfiler loci from the Maghreb (North Africa). *Forensic Sci. Int.* 121: 199-200
- (188) Jorquera, H., Budowle, B. (1998) Chilean population data on ten PCR-based loci. *J. Forensic Sci.* 43: 171-173
- (189) Khatib, H. (2001) Allele frequencies of seven short tandem repeat loci in the Ashkenazi Jewish population. *Forensic Sci. Int.* 121: 205-206
- (190) Miscicka-Sliwka, D., Czarny, J., Grzybowski, T., Wozniak, M. (2001) Population genetics of the STRs vWA, TH01, TPOX, CSF1PO, D5S818, D13S317, D7S820, D16S539, LPL, F13B, FESFPS, F13A01 and ACTBP2 in the Pomerania-Kujawy region of Poland. *Forensic Sci. Int.* 119: 119-122
- (191) Panneerchelvam, S., Vanaja, N., Baskar, D., Sivapriya, V., Damodaran, C. (2001) Distribution of alleles of 12 STR loci in Tamil population (south India). *Forensic Sci. Int.* 119: 126-128

- (192) Ricci, U., Sani, I., Giunti, L., Guarducci, S., Coviello, S., Giovannucci Uzielli, M.L. (2002) Analysis of 13 tetrameric short tandem repeat loci in a population of Tuscany (Central Italy) performed by means of an automated infrared sequencer. *Forensic Sci. Int.* 125: 83-85
- (193) Tahir, M.A., Herrera, R.J., Khan, A.A., Kashyap, V.K., Duncan, G., Barna, C., Budowle, B., Rowold, D.J., Amjad, M., Sinha, S. (2000) Distribution of HLA-DQA1, Polymarker, CSF1PO, vWA, TH01, TPOX, D16S539, D7S820, D13S317, and D5S818 alleles in East Bengali and West Punjabi populations from Indo-Pak subcontinent. *J. Forensic Sci.* 45: 1320-1323
- (194) Tofanelli, S., Taglioli, L., Varesi, L., Paoli, G. (2001) The STR-based genetic profile of the population from Corsica island (France). *Forensic Sci. Int.* 123: 33-38
- (195) Xiaodong, X., Xunling, W., Xiaolin, H., Guifang, R., Xiaolin, L. (2001) Tibetan population data on the PCR-typed loci D16S539, D7S820, D13S317, HUMF13A01, FESFPS, vWA, HUMTH01, TPOX and CSF1PO. *Int. J. Legal Med.* 114: 349-351
- (196) Yunis, J.J., Baena, A., Garcia, O., Uriarte, I., Yunis, E.J. (2001) Population data of F13A01, FES/FPS, VWA, CSF1PO, TPOX and TH01 short tandem repeat loci in a sample of African descent individuals of Colombia. *Forensic Sci. Int.* 117: 235-236
- (197) Barbaro, A., Cormaci, P., Falcone, G., La Marca, A., Barbaro, A. (2002) Population genetic study of 15 STRs loci using AmpF/STR identifier kit (Applied Biosystems). *Progr. Forensic Genet.* 9, in press
- (198) Lorente, M., Lorente, J.A., Wilson, M.R., Budowle, B., Villanueva, E. (1997) Spanish population data on seven loci: D1S80, D17S5, HUMTH01, HUMVWA, ACTBP2, D21S11 and HLA-DQA1. *Forensic Sci. Int.* 86: 163-171
- (199) Instituto Nacional de Toxicologia, Departamento de Sevilla (Spain). Cited from Database of Nuclear DNA / gep-isfh
- (200) Sanchez-Molina, J., Calvet, R. (2000) Allelic frequencies for the HLA-DQA1, D1S80, HUMTH01, HUMTPOX, HUMCSF1PO and HUMVWA loci in Cantabria (Middle North Spain). *J. Forensic Sci.* 45: 167-169
- (201) Comisario General de Policia Cientifica, Spain. Cited from Database of Nuclear DNA / gep-isfh
- (202) Iriondo, M., Barbero, M.C., Izagirre, N., Manzano, C. (1997) Data on six short-tandem repeat polymorphisms in an autochthonous Basque population. *Hum. Hered.* 47: 131-137
- (203) Aler, M., Alvarez, M., Segui, M., Salas, A., Bellas, S., Brion, M.J., Murcia, E., Gisbert, M. (1998) Amplificación génica de 4 loci microsatélitas en una muestra de población de la Comunidad Valenciana (España). In: Nuno, D., Corte-Real, F. (eds.): *Temas de Medicina Legal. Ediação de Centro de Estudos de Pós-Graduação em Medicina Legal, Coimbra (Portugal)*, 471-479
- (204) Brito, R.M., Ribeiro, T., Espinheira, R., Geada, H. (1997) Ilha da madeira. Perfil de DNA populacional. I Congreso Ibérico de Medicina Legal, Funchal. Cited from Database of Nuclear DNA / gep-isfh
- (205) Universidad de Oporto (Portugal), IPATIMUP. Cited from Database of Nuclear DNA / gep-isfh
- (206) Jimenez, M., Galindo, A., Paredes, M., Bustos, I., Lizarazo, R., Calderon, G. (1999) Caracterización genética de los loci STR HUMvWAA31, HUMF13A1, HUMFES/FPS en cinco ciudades colombianas y su aplicación forense. *Jornadas de Genética Forense. Reunión del GEP-ISFH, Bilbao*, 181-183. Cited from Database of Nuclear DNA / gep-isfh
- (207) Laboratory: PRIMAGEN. Datos suministrados por el Laboratorio Primagen de Argentina. Cited from Database of Nuclear DNA / gep-isfh
- (208) Dios, S., Luis, J.R., Teixeira Ribeiro, J.C., Caeiro, B. (1998) Population database of STRs in West Africa: a genetic study of TPOX, HUMVWA31/A, HUMTH01, and CYP19. *Genetica* 104: 77-83
- (209) Pepinski, W., Niemcunowicz-Janica, A., Janica, J., Skawronska, M., Koc-Zorawska, E., Rydzewska, M., Soltyszewski, I. (2001) Population data for the STR systems D8S1132, CD4, VWA and TH01 in the region of Podlasie (Northeastern Poland). *Med. Sci. Monit.* 7: 130-133
- (210) Bravo, M.L., Moreno, M.A., Builes, J.J., Salas, A., Lareu, M.V., Carracedo, A. (2001) Autosomal STR genetic variation in negroid Chocó and Bogotá populations. *Int. J. Legal Med.* 115: 102-104
- (211) Stojkovic, O., Culjkovic, B., Vukosavic, S., Romac, S. (2001) Yugoslav population data on nine STR loci. *Forensic Sci. Int.* 115: 239-240
- (212) Gusmão, L., Prata, M.J., Miranda, C., de Jesus Trovada, M., Amorim, A. (2001) STR data from S. Tomé e Príncipe (Gulf of Guinea, West Africa) *Forensic Sci. Int.* 116: 53-54
- (213) Alves, C., Gusmao, L., Pereira, L., Amorim, A. (2001) STR data (CD4, CSF1PO, F13A01, FES/FPS, MBPB, TH01, TPOX) from North Portugal. *Forensic Sci. Int.* 123: 76-77

- (214) Pineda-Bernal, L., Borjas-Fajardo, L., Zabala, W., Fernández, E., Delgado, W., Salas, A., Sánchez-Diz, P., Carracedo, A. (2002) Data for nine autosomal STRs markers (CSF1PO, D13S31, D16S539, D7S820, F13A01, FESFPS, TH01, vWA, TPOX) from Venezuela. *Forensic Sci. Int.* 125: 277-278
- (215) Wang, B., Pang, H., Koda, Y., Soejima, M., Kimura, H. (2002) Polymorphisms of eight STR loci in Chinese and African (Xhosa) populations. *Forensic Sci. Int.* 125: 279-280
- (216) Nussbaumer, C., Hanslik, S., Fichtinger, M., Bauer, G. (2001) STR data for the AmpFISTR SGM plus from a regional population of Austria. *Forensic Sci. Int.* 122: 181-183
- (217) Akbasak, B.S., Budowle, B., Reeder, D.J., Redmann, J., Kline, M.C. (2001) Turkish population data with the CODIS multiplex short tandem repeat loci. *Forensic Sci. Int.* 123: 227-229
- (218) Biondo, R., Spinella, A., Montagna, P., Walsh, P.S., Holt, C., Budowle, B. (2001) Regional Italian allele frequencies at nine short tandem repeat loci. *Forensic Sci. Int.* 115: 95-98
- (219) Grattapaglia, D., Schmidt, A.B., Costa e Silva, C., Stringher, C., Fernandes, A.P., Ferreira, M.E. (2001) Brazilian population database for the 13 STR loci of the AmpF/STR® Profiler Plus™ and Cofiler™ multiplex kits. *Forensic Sci. Int.* 118: 91-94
- (220) Alves, C., Gusmao, L., Amorim, A. (2001) STR data (AmpF/STR Profiler Plus and GenePrint CTTv) from Mozambique. *Forensic Sci. Int.* 119: 131-133
- (221) Wong, D.M., Law, M.Y., Fung, W.K., Chan, K.L., Li, C., Lun, T.S., Lai, K.M., Cheung, K.Y., Chiu, C.T. (2001) Population data for 12 STR loci in Hong Kong Chinese. *Int. J. Legal Med.* 114: 281-284
- (222) Steinlechner, M., Berger, B., Scheithauer, R., Parson, W. (2001) Population genetics of ten STR loci (AmpF/STR SGM plus) in Austria. *Int. J. Legal Med.* 114: 288-290
- (223) Gené, M., Moreno, P., Borrego, N., Piqué, E., Brandt, C., Mas, J., Luna, M., Corbella, J., Huguet, E. (2001) The Bubi population of Equatorial Guinea characterised by HUMTH01, HUMVWA31A, HUMCSF1PO, HUMTPOX, D3S1358, D8S1179, D18S51 and D19S253 STR polymorphisms. *Int. J. Legal Med.* 114: 298-300
- (224) Rolf, B., Horst, B., Eigel, A., Sanguansermisri, T., Brinkmann, B., Horst, J. (1998) Microsatellite profiles reveal an unexpected genetic relationship between Asian populations. *Hum. Genet.* 102: 647-652
- (225) Promega Corp. (2002) Genetic identity reference information. Population statistics. <http://www.promega.com>
- (226) Reddy, B.M., Sun, G., Luis, J.R., Crawford, M.H., Shyam Hemam, N., Deka, R. (2001) Genomic structure at thirteen short tandem repeat loci in a substructured caste population, Golla, of Southern Andhra Pradesh, India. *Hum Biol.* 73: 175-190
- (227) Iriondo, M., De la Rúa, C., Del carmen Barbero, M., Aguirre, A., Manzano, C. (1999) Analysis of 6 short tandem repeat loci in Navarre (Northern Spain). *Hum. Biol.* 71: 43-54
- (228) Tomàs, C., Picornell, A., Castro, J.A., Misericordia Ramon, M. (2001) Genetic analysis in five western mediterranean populations: Variation at five tetrameric short tandem repeat loci. *Hum. Biol.* 73: 349-363
- (229) Kondopoulou, H., Loftus, R., Kouvatsi, A., Triantaphyllidis, C. (1999) Genetic structure in 5 Greek population samples using 12 highly polymorphic DNA loci. *Hum. Biol.* 71: 27-42
- (230) Mukherjee, N., Majumder, P.P., Roy, B., Roy, M., Dey, B., Chakraborty, M., Banerjee, S. (1999) variation of 4 short tandem repeat loci in 8 population groups of India. *Hum. Biol.* 71: 439-446
- (231) Yamaguchi, H., Takizawa, H., Shimasaki, C. (1996) Frequency of the three STR loci (TPOX, CSF1PO, TH01), in a Japanese population determined using a Gene Print™ STR Multiplex kit. *Jpn. J. Legal Med.* 50: 163-167