

Supplemental Data

Mitochondrial Haplogroup U5b3:

A Distant Echo of the Epipaleolithic in Italy

and the Legacy of the Early Sardinians

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Table S1. List of U5b3 Complete Sequences Included in Figure 1

Sequence ID ^a	Haplogroup	Geographic Origin	GenBank ID	References
1	U5b3	Sicily	GQ129143	[1]
2 ^b	U5b3	Southern France	GQ129144	[1]
3	U5b3	Bosnia	GQ129145	[1]
4	U5b3	Croatia	GQ129146	[1]
5	U5b3	Spain	GQ129147	[1]
6	U5b3	Piedmont - Northern Italy	GQ129148	[1]
7	U5b3a1a	Sardinia	GQ129149	[1]
8	U5b3a1a	Sardinia	GQ129150	[1]
9 ^c	U5b3a1a	Sardinia	GQ129151	[1]
10	U5b3a1a	Sardinia	DQ523655	[2]
11	U5b3a1a	Sardinia	DQ523658	[2]
12	U5b3a1a	Sardinia	DQ523664	[2]
13	U5b3a1a	Sardinia	GQ129152	[1]
14	U5b3a1a	Sardinia	GQ129153	[1]
15	U5b3a1a	Sardinia	DQ523628	[2]
16	U5b3a1a	Sardinia	DQ523644	[2]
17	U5b3a1a	Sardinia	DQ523669	[2]
18	U5b3a1a	Sardinia	GQ129154	[1]
19	U5b3a1a	Sardinia	GQ129155	[1]
20	U5b3a1a	Sardinia	EU597508	[3]
21	U5b3a1a	Sardinia	GQ129156	[1]
22	U5b3a1a	Undefined - Italy	AF346988	[4]
23	U5b3a1a	Sardinia	DQ523624	[2]
24 ^b	U5b3a1b	Southern France	GQ129157	[1]
25	U5b3a1b	Delaware - USA	GQ129158	[1]
26	U5b3a2	Marche - Central Italy	GQ129159	[1]

27	U5b3a2	Morocco	GQ129160	[1]
28	U5b3a2	Marche - Central Italy	GQ129161	[1]
29	U5b3a2	Marche - Central Italy	GQ129162	[1]
30	U5b3a2	England - UK	EU926618	[1]
31	U5b3a2	Pennsylvania - USA	GQ129163	[1]
32	U5b3a2	Estonia	GQ129164	[1]
33	U5b3b	Crete - Greece	GQ129165	[1]
34	U5b3b	Spain	GQ129166	[1]
35	U5b3b	Bohemia - Czech Rep.	GQ129167	[1]
36	U5b3b	Marche - Central Italy	GQ129168	[1]
37	U5b3b	England - UK	EU130681	[1]
38	U5b3b	Palatinate - Germany	GQ129169	[1]
39	U5b3c	Sardinia	GQ129170	[1]
40	U5b3c	Cantabria - Spain	GQ129171	[1]
41	U5b3c	Sicily	GQ129172	[1]
42	U5b3d	Southern Spain	GQ129173	[1]
43	U5b3d	Iraq	GQ129174	[1]
44	U5b3e	Scotland - UK	GQ129175	[1]
45 ^d	U5b3e	Southern Germany	GQ129176	[1]
46	U5b3e	Poland	GQ129177	[1]
47	U5b3e	Bulgaria	GQ129178	[1]
48	U5b3f	USA	GQ129179	[1]
49	U5b3f	Latium - Central Italy	GQ129180	[1]
50	U5b3f	Latium - Central Italy	GQ129181	[1]
51	U5b3f	Catalonia - Spain	GQ129182	[1]
52	U5b3f	Latium - Central Italy	GQ129183	[1]

^a ID numbers correspond to the numbers in Figure 1.

^b The control-region sequence of this mtDNA was previously published.⁵

^c The control-region sequence of this mtDNA was previously published.⁶

^d The control-region sequence of this mtDNA was previously published.⁷

Table S2. Population Distribution of Haplogroup U5b3

Region, Population/Country	Sample size	U5b3 ^a		References
		Number of subjects	%	
<i>Western Europe:</i>				
Austria	374	0	-	[8, 9]
Balearic Islands	256	4	1.56	[10, 11]
Basques	237	0	-	[5, 6, 12, 13]
Denmark	247	0	-	[1, 6]
England	335	2	0.60	[1, 6, 14]
Finland	405	0	-	[1, 6, 15, 16]
France	234	1	0.43	[1, 5, 6, 17]
France Centre-South	240	2	0.83	[5, 18]
France Centre-West	124	0	-	[5]
France North & Belgium	267	1	0.37	[5, 6, 19]
France-Corse	99	0	-	[11, 20]
France-Normandie-Bretagne	383	0	-	[5, 18]
Germany Centre	115	0	-	[1, 21, 22]
Germany North	426	0	-	[21, 23-25]
Germany South	356	1	0.28	[7, 21, 26]
Iceland	457	2	0.44	[6, 27]
Ireland	300	1	0.33	[28]
Norway	554	1	0.18	[6, 14]
Portugal Centre	160	0	-	[29, 30]
Portugal North	184	2	1.09	[29, 30]
Portugal South	196	0	-	[29, 30]
Saami	255	0	-	[1, 15, 31, 32]
Scotland	1199	3	0.25	[14]
Spain	554	3	0.54	[1, 33-36]
Spain North-East	562	2	0.36	[1, 13, 37]
Spain North-West	439	1	0.23	[1, 13, 30, 38, 39]
Spain South	641	5	0.78	[1, 10, 11, 13, 34, 35]
Sweden	512	0	-	[1, 6]
Switzerland	434	1	0.23	[1, 40, 41]
Wales	92	0	-	[21]
<i>Western Europe-Italy:</i>				
Apulia Calabria	228	0	-	[1]
Campania	314	0	-	[1]
Latium	736	6	0.82	[1, 42, 43]
Lombardy	215	0	-	[1, 43]
Marche	1125	8	0.71	[1, 43]
Piedmont	1006	5	0.50	[1, 43]
Sardinia	1224	47	3.84	[1, 6, 11, 44]

The American Journal of Human Genetics, Volume 84

Sicily	699	3	0.43	[1, 6, 45]
South Tyrol	540	0	-	[46, 47]
Tuscany	483	0	-	[1, 11, 43, 48, 49]
Umbria	202	0	-	[1]
<i>Eastern Europe:</i>				
Albania	242	0	-	[1, 6]
Bashkirs	332	0	-	[1]
Bosnia	512	2	0.39	[1, 50]
Bulgaria	268	1	0.37	[1, 6]
Byelorussia	351	0	-	[1]
Croatia	1405	4	0.28	[1, 42]
Czech Republic	83	0	-	[6]
Estonia	646	1	0.15	[6, 51, 52]
Greece	735	0	-	[1, 6, 53, 54]
Greece-Crete	395	1	0.25	[1, 53]
Greece-Lemnos	60	0	-	[1]
Hungary	647	2	0.31	[1, 55, 56]
Karelians	176	0	-	[1]
Macedonia	162	0	-	[1]
Montenegro	138	1	0.72	[1]
Poland	572	1	0.17	[1, 6, 57]
Rumania	453	0	-	[1, 6]
Russia	1879	0	-	[1, 6, 57-59]
Serbia	126	0	-	[1]
Slovakia	885	2	0.23	[1, 60, 61]
Slovenia	104	0	-	[50]
Ukraine	1142	0	-	[1, 59]
<i>Caucasus:</i>				
Armenia	191	1	0.52	[6]
Azerbaijan	48	0	-	[6]
Caucasus North	356	0	-	[6, 62, 63]
Georgia	113	0	-	[62, 64, 65]
<i>Middle East:</i>				
Iran	1311	0	-	[1, 63, 66]
Iraq	261	1	0.38	[1, 6]
Jordan	146	0	-	[6]
Kurds	82	0	-	[6, 64]
Pakistan	109	0	-	[62, 67]
Palestinians	227	0	-	[6, 68]
Syria	118	0	-	[6, 53]
Turkey	340	0	-	[6, 62, 69]
<i>Africa:</i>				
Algeria	125	0	-	[13, 35]
Egypt	525	0	-	[1, 70, 71]

The American Journal of Human Genetics, Volume 84

Libya	129	0	-	[1]
Mauritania-Morocco	999	2	0.20	[1, 11, 35, 71, 72]
Senegal	240	0	-	[72, 73]
Tunisia	724	0	-	[1, 35, 74]
<i>TOTAL</i>	34766	120		

^a For many of the published datasets only control-region data were available (from np 16030 to np 16365). In these cases, U5 mtDNAs were affiliated within U5b3 when lacking 16189 or 16256 and harbouring 16304 (with the exception of U5b3a1a clade in which 16304 is reverted).

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