

SUPPLEMENTARY INFORMATION

A European population in early Bronze Age Crete

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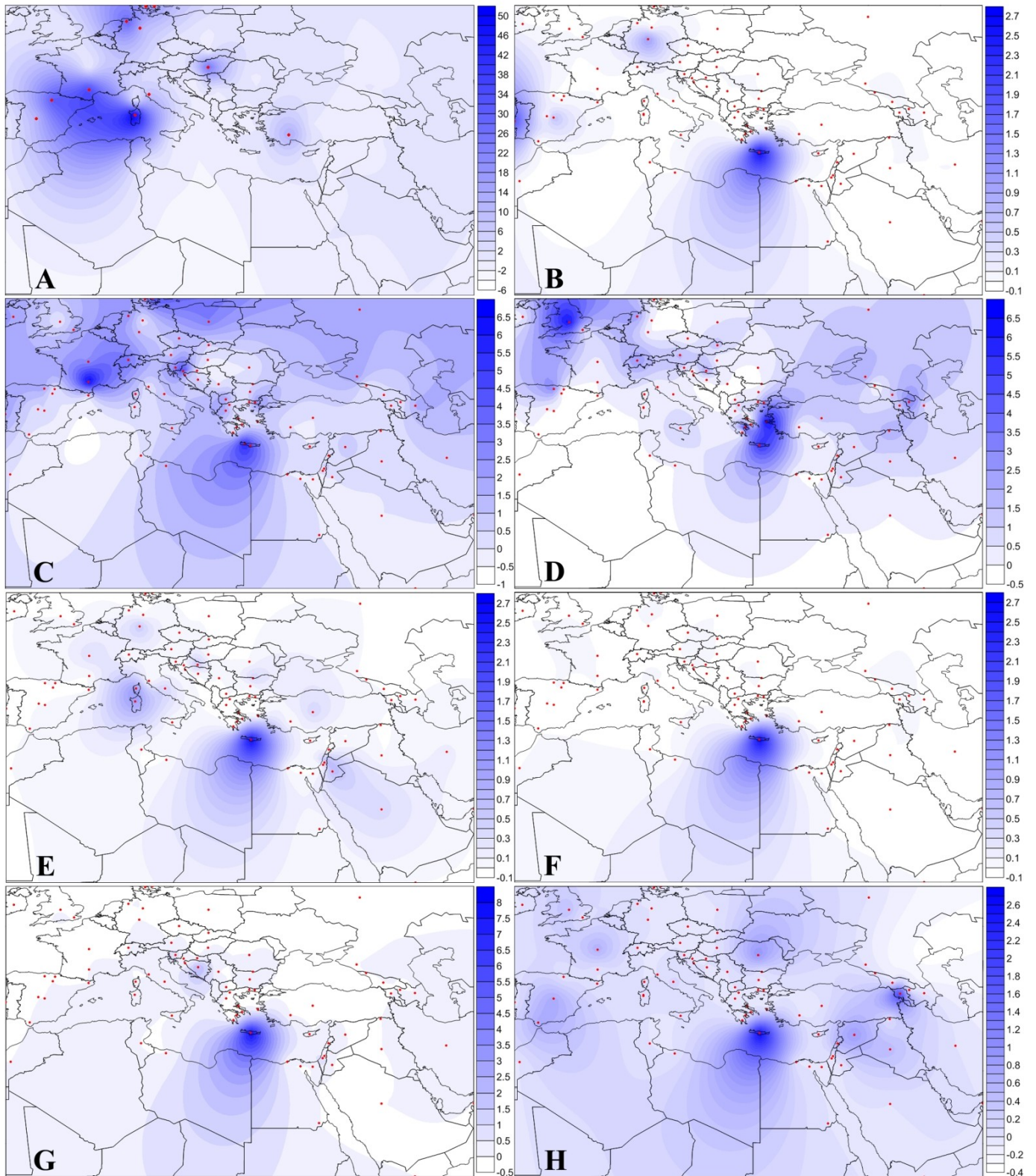
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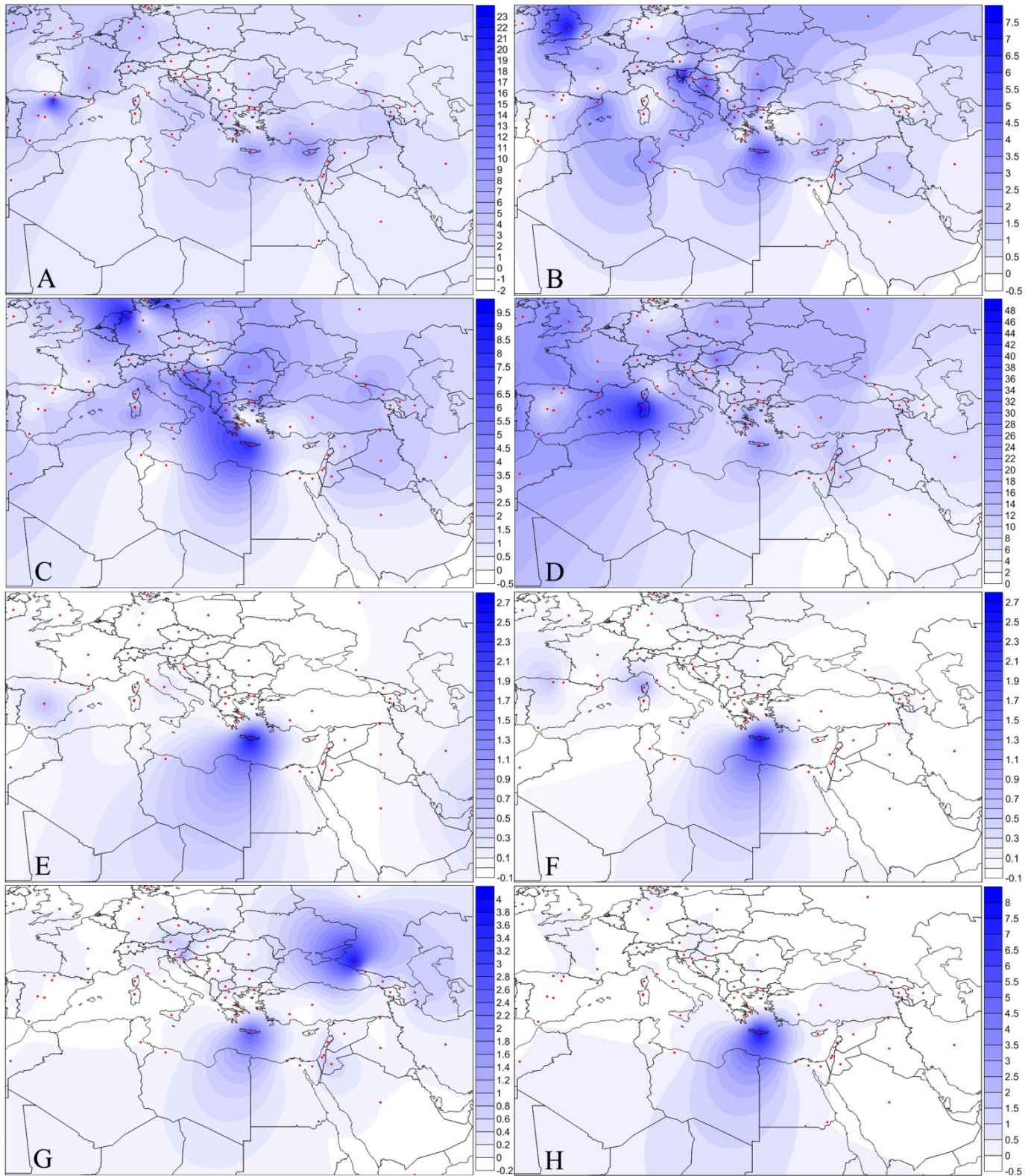
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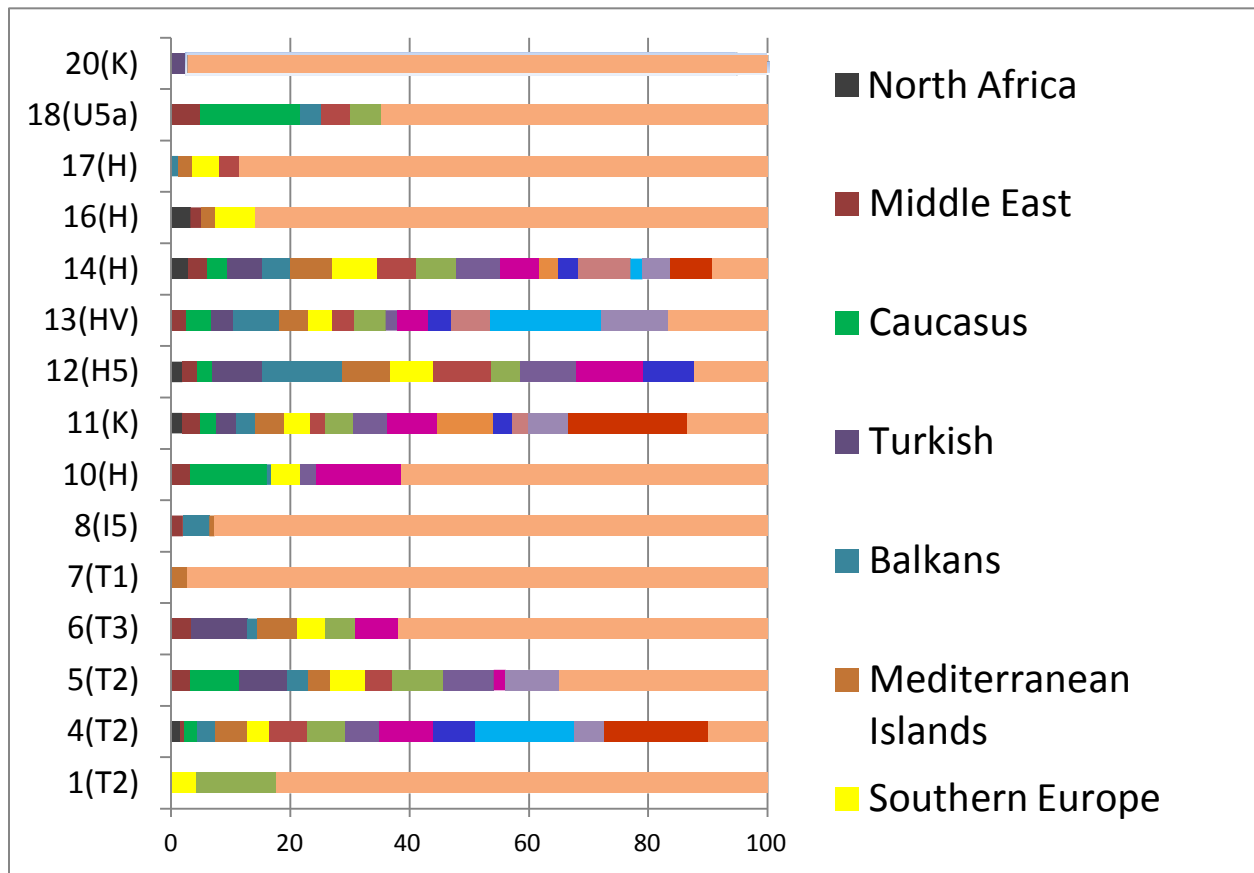
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Supplementary Figure S1. Geographical interpolation of shared mtDNA HVS-1 lineages. The blue gradient represents the percentage of shared lineages for Minoan haplotypes. The higher percentages are represented in blue and the lower are in white. Six of the 17 Minoan lineages are private and are not shown in suppl. Figures 1 and 2 (haplotypes 2, 3, 9, 15, 19, 21). Crosses denote the location of populations used in this analysis. **A**, sharing with ancient populations; **B**, haplotype 1 shared with 3 populations; **C**, haplotype 4 shared with 40 populations; **D**, haplotype 5 shared with 37 populations; **E**, haplotype 6 shared with 12 populations; **F**, haplotype 7 shared with 1 population; **G**, haplotype 8 shared with 8 populations; **H**, haplotype 10 shared with 10 populations



Supplementary Figure S2. Geographical interpolation of shared mtDNA HVS-1 lineages. The blue gradient represents the percentage of shared lineages for Minoan haplotypes. The higher percentages are represented in blue and the lower are in white. Crosses denote the location of populations used in this analysis. A, haplotype 1 shared with 63 populations; B, haplotype 12 shared with 50 populations; C, haplotype 13 shared with 61 populations; D, haplotype 14 shared with 82 populations; E, haplotype 16 shared with 6 populations; F, haplotype 17 shared with 4 populations; G, haplotype 18 shared with 13 populations; H, haplotype 20 shared with 1 population.



Supplementary Figure S3. Minoan haplotypes are rarely observed outside Europe. Distribution of Minoan haplotypes across different geographic regions and eras. Considering the occurrences of each Minoan haplotype across our entire dataset (Minoans, 71 extant populations and 11 additional ancient populations) the percentage of each haplotype per studied geographic region and era is shown. Populations are grouped here in broad geographic regions and eras (Table S4). Six Minoan haplotypes were private to the Minoans and are not shown (Table S2).

Supplementary Table S1. Authentication of Results

Lassithi cave samples compliant with all precautionary ancient DNA criteria	69
Samples that completely failed to amplify	7
Samples that failed to amplify with all primers	5
Samples with non-reproducible sequencing results	5
Samples with reproducible HVS-1 sequencing results	52
Submitted to DNA extraction and genomic sequencing by a different UW lab and different personnel	52
HVS-1 sequencing not confirmed by genomic sequencing	2
HVS-1 sequences were not present in the DNA submitted to genomic sequencing	13
Samples in which the results of HVS-1 sequencing were verified by genomic sequencing and used in statistical analysis	37

Confirmation and authentication of sequencing results on DNA extracted from teeth of craniums found in the Lassithi Cave of Ayios Charalambos.

Supplementary Table S2. Haplotype Designation for 37 Minoans.

Individual	HVS-1 SNPs	UW mtDNA Genome Sequencing SNPs	Haplotype
1AH	16311(C)	14766(C)	HV
2AH	-CRS-	14766(C)	H13a1a
3AH	16126(C), 16294(T), 16296(T), 16304(C)	16294(T), 4917(G) 10463(C) (no 15607)	T2
6AH	16266(T)	None	H
7AH	-CRS-	2706(A), no 16519	H
9AH	16304(C)	2706(A), 16304(C)	H5
10AH	16126(C), 16294(T), 16296(T)	14905(A)	T2
11AH	16111(T), 16185(T) , 16224(C), 16311(C)	12372(A)	K
12AH	-CRS-	2706(G)	H7
15AH	16111(T), 16185(T) , 16224(C), 16311(C)	3480(G), 14167(T), 16224(C), 16311(C)	K
16AH	-CRS-	2706(A)	H
17AH	-CRS-	2706(A)	H
18AH	16126(C), 16294(T), 16296(T)	16294 (T), 16296 (T), 1888(A)	T
19AH	-CRS-	2706(A)	H
4H	16192(T), 16256(T), 16270(T), 16311(C)	12308(G), 12372(A)	U5a

6H	16093(C), 16223(T), 16243(C), 16292(T)	204(C), 207(A), 15884(C) 16093(C), 16223(T), 16243(C)	W
7H	16290(T)	2706(A)	H
8H	16172(C)	2706(A)	H
9H	16126(C), 16163(G), 16186(T), 16189(C), 16263(C), 16294(T)	10463(C), 15928(A), 16263(C)	T1
16H	16224(C), 16311(C)	10550(G), 11299(C), 12308(G), 16311(C)	K
20H	-CRS-	2706(A)	H
21H	16126(C), 16153(A), 16240(A→C), 16294(T), 16296(T)	10463(C), 13368(A), 15607(G), 15298(A), 16153(A)	T5
24H	16311(C)	11719(A), 14766(C)	HV
26H	16069(T), 16126(C), 16232(T) , 16291(T), 16293(A→C)	13708(A)	J2
#4	16182(A→C), 16183(A→C), 16189(C), 16234(T), 16290(T), 16324(C)	16290(T)	U
#6	16311(C)	2706(G), 7028(T), 11719(A), 14766(C), 16311(C)	HV
#7	-CRS-	73(A), 2706(G), 7028(T)	RO
#8	16145(A), 16179(T) , 16189(C), 16223(T), 16278(T), 16332(T) , 16344(T) , 16362(C)	153(G), 14470(C), 16278(T)	X
#11	16290(T), 16304(C)	16304(C), 16519(T)	H
#12	16129(A), 16148(T), 16186(T) , 16223(T)	16223(T)	15
#13	16129(A), 16148(T), 16223(T)	199(T), 250(C), 16129(A) 16223(T), 16391(A)	15

#14	16111(T), 16224(C), 16311(C)	12372(A), 16111(T)	K
#17	16129(A), 16148(T), 16186(T) , 16223(T)	10034(C), 16129(A), 16148(T), 16223(T), 16391(A)	I5
#19	16089(A), 16126(C), 16294(T), 16296(T), 16304(C)	13368(A)	T2
#21	16224(C), 16311(C)	11467(G), 12308(G)	K
#22	16224(C), 16311(C)	10550(G), 11299(C), 11467(G), 12308(G), 16311(C)	K
#23	16126(C), 16292(T), 16294(T), 16339(T)	4917(G), 11251(G), 15607 (G), 15928(A)	T3

mtDNA Hypervariable Sequence 1 region motifs, mtDNA genome sequencing, and haplotype designations for 37 Minoans. Mutations in bold represent deamination events. In all 37 individuals there was correspondence between HVS 1 sequencing and genome sequencing. Only haplotype defining mutations are noted in the above Table. CRS: Cambridge Reference Sequence; Letters AH, H and the symbol # denote three different groups of Minoans.

Supplementary Table S3. Next Generation Genomic Sequencing of 52 Minoans

Minoan1AH

2852 c→t
3872 c→t (c)
3874 c→t (c)
6029 c→t (c)
8475 c→t
10778 c→t
10967 a→t
12531 c→t (c)
12721 c→t (c)
15583 a→t (a)

Minoan2AH

11374 a→c
11375 a→t

Minoan3AH

263 a→g

2706 a→g

4917 a→g

10463 t→c

15166 c→a

15167 t→g

15326 a→g

15599 c→g

16294 c→t

Minoan4AH

1254 c→t

5342 c→a

Minoan5AH

153 a→g

2772 c→t

2773 a→g

8067 a→c

Minoan6AH

204 t→g

262 c→t

263 a→g

3329 t→c

3672 a→c (a)

4933 t→g

5326 c→t

6685 a→g (a)

13852 t→g

14053 a→c

14055 c→t

14727 t→c

14793 a→g

15403 c→t

Minoan7AH

263 a→g

309 c→t
310 t→c
750 a→g
2681 g→a (g)
3374 c→a
6445 c→a
9755 g→a
12372 g→a
13267 g→a
14249 g→a
16519 t→c

Minoan8AH

709 g→a
791 g→c
1420 t→c (t)
1438 a→g
1523 a→g
2141 t→c
2617 a→t
2824 c→a
6266 a→g (a)
16001 a→g

Minoan9AH

750 a→g
908 c→g (c)
1420 t→c (t)
1438 a→g

2141 t→c (t)
2617 a→t (a)
2906 c→a (c)
2958 a→t
3011 a→t (a)
3012 t→g (t)
3550 g→a
3702 a→t (a)
6403 c→g (c)
6460 g→a (g)
7125 a→c (a)
7133 c→g (c)
9841 c→a
9931 g→a (g)
10636 c→t
11096 a→t
11098 a→t
12735 c→t
13025 a→c
13264 c→t (c)
13800 c→t
13802 c→t (c)
14020 t→c
15248 t→a (t)
15326 a→g
15401 a→g (a)

Minoan10AH

750 a→g

1033 t→a (a)
1438 a→g
1448 t→g
11797 a→g (a)
12509 a→c
12741 c→t
14905 g→a
15452 c→a

Minoan11AH

497 c→t
750 a→g
1419 g→c (g)
1420 t→c
1438 a→g
2617 a→t, a→g (a)
4917 a→g
6000 g→a (g)
7028 c→t
10776 c→t
10995 c→a
12196 c→t
12372 g→a
12376 t→g
12435 c→t (c)
14167 c→t
15326 a→g

Minoan12AH

263 a→g
712 c→g
750 a→g
932 c→g
934 g→c
1420 t→c
1438 a→g
1465 c→g
2706 a→g
3024 t→a
7914 a→c (a)
9053 g→t (g)
9820 g→c
9829 t→a
11251 a→g (a)
11859 t→a
12717 c→t
13942 a→c (a)

Minoan13AH

263 a→g
750 a→g
1420 t→c
1437 t→c
1438 a→g
2535 a→g
13097 t→c
15326 a→g

Minoan14AH

5445 c→t
11090 a→c
12215 t→c
12249 a→c
12593 c→t

Minoan15AH

3480 a→g
3739 a→c
7886 g→t
7888 c→t
9902 c→t (c)
9931 g→t
10398 a→g
14167 c→t
14922 c→t (c)
14932 c→t (c)
15039 t→c
15040 c→a
15326 a→g
15540 c→t
15544 c→t
15607 a→g (a)
15945 c→t
16224 t→c
16311 t→c

Minoan16AH

2709 a→c
3405 a→g
4063 g→a
8685 c→t
9755 g→a
12476 g→a (g)
13351 c→t
16053 c→t

Minoan17AH

257 a→c
263 a→g
2413 c→t (c)
5307 a→c
7873 c→t
16232 c→t
16243 t→g

Minoan18AH

486 c→t
1852 c→g
1888 g→a
2214 a→c
2393 c→t
5303 c→t
8523 c→t
9837 g→a
9939 g→a
11751 a→g

13272 c→t
14766 c→t
15326 a→g
15452 c→a
16118 g→a
16107 c→t
16292 c→t
16296 c→t

Minoan19AH

263 a→g
750 a→g
874 g→a
1438 a→g
1720 c→t
2419 c→t
2755 a→g
3433 t→a
3434 a→g
3468 a→c (a)
8147 c→t (c)
8622 c→t
9778 g→a (g)
9785 c→t
10244 c→a
10877 c→a
10894 c→t
11588 c→t (c)
11645 c→t

11639 a→c
11870 c→g (c)
12374 c→t
12446 a→t
12561 g→c
13180 g→t
13335 c→t
14413 c→a (c)
15386 c→t (c)
15740 c→t
15782 c→a (c)
15911 a→g
16302 a→g

Minoan20AH

263 a→g
2683 c→a (c)
2706 a→g
10641 a→c
10676 c→a (a)
12990 a→t
14472 c→a
15341 t→g

Minoan3H

348 c→t
6684 t→g
9755 g→a
9779 c→g

12346 c→t
16422 t→c

Minoan4H

495 c→t (c)
1511 c→t
2706 a→g
7028 c→t
7641 a→t
9888 a→c (a)
9889 c→a (c)
11719 g→a
12308 a→g
12372 g→a
16399 a→g
16519 t→c

Minoan6H

73 a→g
204 t→c
207 g→a
263 a→g
310 t→c
332 c→t
834 g→c
1019 a→g
1438 a→g
2706 a→g
3006 t→c (t)

3012 t→g (t)
3146 g→a
4837 c→t
5046 g→a
11277 c→a (c)
11674 c→t
11679 deletion
11719 g→a
11947 a→g
13228 a→t
13570 a→t
14031 a→t
14407 c→t
15326 a→g
15884 g→c
15950 g→a
16093 t→c
16223 c→t
16243 t→c
16519 t→c

Minoan7H

750 a-g
753 a-c
1438 a-g
2782 a-t
2785 c-t
3804 c-a
7708 c-t

9784 a-c
9793 c-a
9884 c-t (c)
10089 a-c
11090 a-c (a)
11945 a-t
12928 c-t
12930 a-t
13513 g-a (g)
13742 c-t

Minoan8H

1418 g→a (g)
1419 g→a (g)
1903 c→t
1907 a→c
4029 c→a
8189 g→a
9319 a→c
9755 g→a
10921 a→g
12531 c→t
12535 c→t
13043 c→t (c)
13044 c→t (c)
13673 a→c
13679 c→t (c)
13957 g→a (g)
14873 c→a

15326 a→g
15612 g→t (g)
16267 c→t

Minoan9H

3127 g→a
3442 c→t (c)
3717 c→t (c)
9257 c→a (c)
9266 g→a
10093 t→c
10463 t→c
11927 a→g
12633 c→a
13063 g→a
14766 c→t
15654 t→a
15674 t→a (t)
15928 g→a
16263 t→c

Minoan10H

3320 a→c
12210 a→g
13119 c→t
15217 g→a

Minoan12H

710 t→c (t)

2366 g→a
9770 t→c
9772 c→a
7906 c→t
11853 c→a
11855 a→c
11856 a→t
13055 c→t
13056 c→t
16504 g→a

Minoan15H

263 a→g
750 a→g
5360 c→g
7245 a→g
9031 c→t
9034 c→t
13790 a→t (a)
13959 c→a (c)
15246 g→a (g)
14916 c→a

Minoan16H

16 a→t
41 c→t (c)
150 c→t
185 g→a
497 c→t

750 a→g
2227 a→t (a)
2706 a→g
2834 c→t (c)
3492 a→c
3661 t→g
3739 a→c
3913 g→a
3916 g→a
4769 a→g
6400 c→t
6446 g→t
7028 c→t
7707 c→t (c)
8414 c→a (c)
8415 t→g (t)
8416 c→a (c)
8417 c→t
9055 g→a
9061 c→a (c)
9852 a→c (a)
10398 a→g
10448 t→a
10452 g→a
10550 a→g
10630 t→c (t)
11169 g→c (g)
11299 t→c
11397 a→c (a)

11687 a→c (a)
11786 a→g (a)
12267 c→g (c)
12286 a→c
12308 a→g
12591 c→g
13806 c→t (c)
13807 c→t (c)
13953 t→c (t)
14167 c→t
14991 t→c
14989 c→t
15026 c→t
15121 a→t (a)
15280 c→t
15326 a→g
16311 t→c
16467 c→a
16475 t→a

Minoan20H

394 c→t (c)
426 a→t (a)
800 c→t (c)
1890 c→t (c)
2393 c→a (c)
2526 c→t (c)
2851 a→g (a)
3448 c→a (c)

3539 c→t (c)
5042 a→t (a)
6021 g→a
6915 g→a (g)
6917 g→a (g)
7491 c→t
8208 c→t (c)
9078 t→c
9755 g→a
9764 c→t (c)
9815 c→t (c)
10404 t→a (t)
10607 c→t (c)
10954 c→a (c)
11090 a→c (a)
12591 c→t (c)
12593 c→t (c)
13151 t→c (t)
13683 c→t (c)
13759 g→a (g)
13986 a→g
14029 deletion
15326 a→g
15418 c→t (c)

Minoan21H

73 a→g
220 t→g
413 g→a (g)

415 a→c (a)
433 c→a (c)
1438 a→g
2840 c→a
3172 c→t (c)
9869 c→a (c)
10463 t→c
11251 a→g
11812 a→g
13368 g→a
14563 c→t
14850 c→t
15326 a→g
15343 c→t (c)
15347 c→t (c)
15607 a→g
15928 g→a
16153 g→a
16519 t→c
16522 t→g (t)

Minoan24H

933 g→a
934 g→a
3638 t→c
3639 a→t
14840 a→c
14839 a→g

Minoan26H

936 g→a
937 t→g
938 a→t
6243 g→a
11426 g→c
11427 c→t
11768 a→t
11772 a→g
11909 a→c
13708 g→a
13984 c→t

Minoan#1

166 c→t
246 t→g
263 a→g
276 a→g
278 a→t
279 t→c
750 a→g
3884 c→t
7218 c→t
7706 g→t
9201 c→g
9798 t→a
10698 c→t
11187 t→a
11190 a→t

Minoan#2

263 a→g
 724 c→t
 725 c→t
 1749 c→t
 1861 t→g
 2150 t→g (t)
 2706 a→g
 3858 a→t (a)
 3859 t→c (t)
 6028 g→c
 6663 a→t
 6664 t→a
 6958 g→c
 7028 c→t
 8709 c→t
 9901 a→c
 10700 a→g
 12053 c→t
 12488 c→t
 15326 a→g
 15603 a→t (a)
 15637 c→a (c)
 15999 a→c
 16299 a→g

Minoan#4

2270 a→t
 5066 c→t

7850 g→t
 9055 g→a
 9262 c→a
 10722 t→a
 11518 g→c
 11519 a→t
 15770 c→t
 16290 c→t

Minoan#5

551 a→t
 2571 g→a
 4099 c→t
 4886 c→t
 9889 t→a
 9890 t→a
 11194 a→g
 11959 a→g
 14149 c→t
 14167 c→t
 15326 a→g

Minoan#6

100 g→c
 227 a→t
 228 g→a
 362 c→t (c)
 512 a→c (a)
 750 a→g

983 c→t
 1529 a→g
 1563 t→a
 1564 a→g
 1910 c→a
 2214 a→c
 2451 t→a (t)
 2706 a→g
 2788 c→t
 2790 a→c
 3061 g→c (g)
 3314 t→c (t)
 3315 g→t (g)
 3477 c→a (c)
 3488 t→a (t)
 3589 c→g (c)
 3590 t→c (t)
 3602 a→c (a)
 3606 g→t (g)
 3608 g→t (g)
 3609 c→t (c)
 3610 c→a (c)
 3612 c→t (c)
 3628 a→c (a)
 3654 c→g (c)
 3709 g→t (g)
 4089 c→t
 5309 c→a (c)
 6006 c→t (c)

6264 g→a (g)
6419 a→c (a)
6600 c→a
6663 a→t (a)
6909 g→t (g)
7028 c→t
7649 a→c (a)
7735 a→g
8015 c→t (t)
8078 g→a (g)
8079 t→a (t)
8157 t→c (t)
8160 a→t (a)
9514 a→c (a)
9848 c→a (c)
9864 a→c
10132 c→g (c)
10161 a→c (a)
10163 c→a (c)
10164 c→g (c)
10165 c→a (c)
10401 g→a (g)
10660 t→c (t)
10685 g→t (g)
11090 a→c (a)
11151 c→t (c)
11156 a→g
11267 a→t (a)
11302 t→a (t)

11398 c→a
11780 a→c (a)
11791 c→t (c)
11793 c→t (c)
11809 t→g (t)
12576 c→a (c)
12624 t→c (t)
12625 a→t (a)
12759 c→a (c)
12872 a→g (a)
12897 a→c (a)
13024 c→a
13052 g→t (g)
13077 c→t (c)
13078 c→t (c)
13243 g→t (g)
13347 c→t (c)
13509 c→a (c)
13567 a→c (a)
13718 g→a (g)
13731 a→c (a)
13807 c→a (c)
13840 c→a (c)
13908 c→g (c)
14175 c→t (c)
14403 t→a (t)
14550 t→g (t)
14770 c→t
14854 c→t (c)

15033 t→c (t)
15154 c→t (c)
15155 c→t (c)
15237 t→a (t)
15326 a→g
15364 c→t (c)
15411 c→t (c)
15415 c→t (c)
15430 c→t (c)
15563 t→a (t)
15756 g→a (g)
15757 a→g (a)
15783 c→t (c)
15897 g→t
16086 t→g (t)
16089 g→t (g)
16119 a→c (a)
16148 c→a (c)
16311 t→c
16490 g→t (g)

Minoan#7

85 g→a (g)
310 t→c
750 a→g
827 a→g (a)
951 g→t
1438 a→g
1690 c→t

1691 c→t
1723 a→c (a)
2434 a→g (a)
2706 a→g
3475 a→t (a)
3712 g→a
5450 c→g
6459 t→a
7028 c→t
7661 c→a
9639 a→g
10056 g→t
10688 g→t (g)
10920 c→t
10923 c→t
10947 c→t (c)
10950 c→t (c)
11338 c→a
11598 c→a
12348 c→t (c)
12350 c→t (c)
11485 t→g
12817 c→t
12928 c→t (c)
13019 g→c (g)
13499 g→a (g)
13895 t→c
13991 t→c
14109 c→a

14383 c→g (c)
14642 c→t
14643 c→t
14817 c→a
15133 a→g
15474 c→g
15598 c→t
15699 g→t (g)
15738 a→t
15771 c→g
16232 c→t (c)
16234 c→t (c)
16311 t→c
16566 g→a

Minoan#8

73 a→g (a)
153 a→g
263 a→g
750 a→g
892 a→c
1438 a→g
2683 c→g (c)
2706 a→g
2822 c→t (c)
2824 c→t (c)
3469 c→a
5304 c→t (c)
5306 c→t (c)

7028 c→t
7132 c→g (c)
7164 g→a
7909 c→t (c)
8393 c→t
8518 a→c (a)
8934 c→t
10954 c→t
10955 c→t
11433 t→g (t)
11434 c→a (c)
11435 g→t (g)
11462 c→t
12174 c→t
12206 c→t (c)
12207 g→a (g)
12564 c→t (c)
13248 c→t (c)
13250 c→t (c)
13708 g→a
13924 c→t
13958 g→a (g)
14367 c→t
14373 c→t
14470 t→c
15380 a→c (a)
15651 c→t (c)
15927 g→a
16278 c→t

Minoan#9

688 a→t
 692 c→t
 3625 g→c (c)
 3321 c→a
 3628 a→c
 6445 c→t
 7492 c→t
 8375 c→t
 9862 t→g
 10652 t→c
 10653 g→t
 12191 c→a
 14020 t→c
 14145 a→g (a)
 14150 c→t
 14818 a→t
 15091 c→t
 15089 a→c
 15326 a→g
 15649 a→g (a)

Minoan#11

152 t→c
 263 a→g
 395 a→t
 518 c→t (c)
 1438 a→g
 1887 a→t (a)

2047 t→g (t)
 2081 t→a
 2146 a→c (a)
 2571 g→a
 3144 a→c (a)
 3145 a→t (a)
 3173 g→t (g)
 3317 c→t
 3318 c→t
 3322 c→t
 3334 a→t (a)
 3335 t→c (t)
 3488 t→a (t)
 3607 g→a
 5453 a→t
 6315 c→a (c)
 6716 a→c
 6962 g→a
 7500 c→t
 7903 a→g
 7905 c→t
 9308 a→g
 9886 t→c (t)
 9991 a→g (a)
 10400 c→a
 10788 t→a (t)
 11643 c→t
 11645 c→t
 12461 c→t (c)

12462 c→t (c)
 12703 a→t
 12704 t→c
 12705 c→t
 13560 c→t (c)
 13746 c→t (c)
 15148 g→a
 15326 a→g
 16304 t→c

Minoan#12

5826 t→g (t)
 12485 c→t
 12961 a→g
 13791 c→t
 14145 a→g
 14150 c→t
 14152 a→g
 14179 a→g
 15892 t→g (t)
 15927 g→c (g)
 16223 c→t
 16225 c→t
 16234 c→t

Minoan#13

198 c→a (c)
 199 c→t
 250 t→c

263 a→g
750 a→g
1719 g→a
2766 c→t (c)
3172 c→a (c)
3201 a→t
3330 c→t
3399 a→t (a)
3401 a→t (a)
3460 g→a (g)
3492 a→c (a)
3608 g→c (g)
5304 c→t
5305 c→t
6553 c→t
7028 c→t
7699 c→t (c)
8018 c→t
8030 c→t (c)
10034 t→c
10398 a→g
10541 a→t
10545 c→t
11141 c→t
11144 a→c
11717 g→a (g)
11719 g→a
12501 g→a
12705 c→t

12773 g→a (g)
12788 c→t (c)
12795 g→t (g)
12961 a→g
13370 c→t (c)
13371 c→t (c)
13780 a→g
13811 c→a (c)
13837 g→a (g)
14054 c→a
15043 g→a
15326 a→g
15924 a→g
15980 c→t
16129 g→a
16223 c→t
16391 g→a
16519 t→c

Minoan#14

956 c→a
983 c→g
2347 c→t (c)
3739 a→g
4928 t→a
5488 c→g
12372 g→a
14766 c→t
15612 g→t

16073 c→a
16111 c→t
16519 t→c

Minoan#17

73 a→g
143 g→a
263 a→g
473 c→t
750 a→g
801 a→t
1421 g→a (g)
1438 a→g
1511 c→t
1719 g→a
2525 c→t (c)
2706 a→g
3155 c→t
3711 a→c (a)
3715 g→a (g)
5054 g→c
6480 g→t
7028 c→t
8481 c→a
9062 t→c (t)
9063 a→t (a)
9514 a→c
9865 t→a (t)
9866 c→g (c)

9953 a→t (a)
10034 t→c
10238 t→c
10398 a→g
10485 a→g (a)
11306 g→t
11312 g→t
11518 g→t (g)
11868 c→g (c)
12705 c→t
13024 c→a
13485 a→g (a)
13487 c→t (c)
13681 a→t (a)
13780 a→g
13943 c→a
13944 a→g
15043 g→a
15298 c→t
15326 a→g
15551 a→c (a)
16129 g→a
16148 c→t
16223 c→t
16265 a→c
16391 g→a
16519 t→c

Minoan#19

750 a→g
7028 c→t
13368 g→a
14338 c→a
14986 c→t (c)
16206 a→g

Minoan#20

320 c→a (c)
321 t→g (t)
322 g→a (g)
750 a→g
1438 a→g
2706 a→g
2833 c→t (c)
2835 c→t (c)
4944 a→g
7012 c→a
7028 c→t
7864 c→a
7880 t→g
9055 g→a
9801 g→t
10398 a→g
12495 a→c
13806 c→a
13807 c→g
14066 c→a
14167 c→t

14392 c→a
14854 c→t
14855 c→t

Minoan#21

263 a→g
497 c→t
508 a→g
509 c→a
635 c→a
750 g→a
1818 a→t
1852 c→a
2648 t→g
3431 c→a
3432 c→g
3433 t→a
4089 c→t
9055 g→a
9732 c→t
9901 a→c
9970 c→a
9971 c→g
11188 g→a
11467 a→g
12062 a→c
12089 a→t
12308 a→g
13393 g→a

13854 c→a

Minoan#22

16 a→t
73 a→g
148 a→t (a)
150 c→t
302 a→c (a)
308 t→c
385 a→g
386 c→t
530 c→t
750 a→g
1374 a→t
2405 c→a (c)
3073 c→t
3288 a→g (a)
3310 c→g (c)
5452 c→a
5477 c→a (c)
7839 a→g
7871 a→t (a)
8165 g→a
9652 a→t
10161 a→t (a)
10188 a→g
10398 a→g
10530 g→t
10550 a→g

10618 a→t
10620 a→g
11243 a→c (a)
11299 t→c
11324 t→c
11382 c→g
11383 t→g (t)
11467 a→g
11467 a→g
11467 g→a
12308 a→g
12561 g→a
12561 g→a
13384 c→t (c)
13385 t→a (t)
13962 t→c
13965 t→a
14416 a→c
14416 a→c
14651 a→t
14979 t→g
15063 c→t (c)
15064 a→t (a)
15497 g→a (g)
15498 g→a (g)
16224 t→c

Minoan#23
73 a→g

105 c→g
146 t→c
750 a→g
1438 a→g
1505 a→g
2333 g→a (g)
2706 a→g
3062 t→a
3161 g→a
3407 g→c (g)
4475 t→c
4739 c→a (c)
4917 a→g
4995 c→a (c)
4974 g→c (g)
4978 t→c (t)
4979 a→t (a)
5438 c→t (c)
7028 c→t
7173 a→c (a)
7260 c→t (c)
7665 c→g
7782 c→t
7913 t→a (t)
7914 a→t (a)
8525 a→c (a)
9258 c→t (c)
9928 a→c (a)
10117 t→g (t)

10137 c→a	11450 c→t (c)	13628 t→a
10277 a→c (a)	11571 t→c (t)	15039 t→c (t)
10314 c→a (c)	11600 g→a (g)	15326 a→g
10361 t→g (t)	11812 a→g	15452 c→a
10754 a→t	11975 t→c (t)	15588 t→a (t)
10836 a→c (a)	12129 t→a (t)	15607 a→g
10837 c→t (c)	12130 t→g (t)	15928 g→a
10840 a→g (a)	12302 c→a	16066 a→t (a)
10841 a→c (a)	12906 c→a (c)	16369 g→a (g)
11251 a→g	12907 c→t (c)	16524 a→g
11300 c→g (c)	13250 c→a	16539 a→g (a)

mtDNA SNPs based on a comparison to the CRS as determined from the genome sequencing analysis of 52 Minoans performed at the University of Washington, Seattle. "()" indicates another nucleotide present in 1 or more 36 mer. In black are the 37 cases in which the HVS-1 sequencing was confirmed by the next generation genomic sequencing. In red color are 13 cases in which HVS-1 sequencing was not confirmed by genomic sequencing because of absence of HVS1 fragments in the sequenced DNA. In blue are two cases in which the genomic sequencing did not confirm the HVS1 sequencing.

Supplementary Table S4: Populations compared with the 37 Minoan samples.

Population Name	Consolidated Population Labels	Samples	Reference
<u>Balkans</u>			
Albanian	Albanian	42	Belledi, Eur. J. Hum. Genet. 8, 480-6, 2000.
Albanian	"	42	Bosch, Annals Hum. Genet. 70, 459-487, 2006.
Aromuns-Dukasi, Albania	Aromuns	33	Bosch, Annals Hum. Genet.70, 459-487, 2006.
Aromuns-Krusevo, Macedonia	"	33	Bosch, Annals Hum. Genet.70, 459-487, 2006.
Aromuns-Poci, Albania	"	29	Bosch, Annals Hum. Genet.70, 459-487, 2006.
Aromuns-Romania	"	42	Bosch, Annals Hum. Genet.70, 459-487, 2006.
Aromuns-Stip, Macedonia	"	38	Bosch, Annals Hum. Genet.70, 459-487, 2006.
Bosnian	Bosnian	150	Harvey, direct deposit, accession numbers AY005485-AY005644
Bosnian	"	144	Malyarchuk, Ann. Hum. Genet. 67, 412-425, 2003.
Bulgarian		855	Karachanak, Int. J. Legal Med. 126, 497-503, 2012
Croatian		58	Harvey, direct deposit, accession numbers AY005666-AY005724
Romanian and Bulgarian		233	Richards, Am. J. Hum. Genet. 67, 1251-1276, 2000.
Romanian-Constantia	Romanian	59	Bosch, Annals Hum. Genet.70, 459-487, 2006.
Romanian-Ploiesti	"	46	Bosch, Annals Hum. Genet.70, 459-487, 2006.
Serbian		54	Harvey, direct deposit, accession numbers AY005728-AY005784
Slavic Macedonians	Slavic Macedonian	37	Bosch, Annals Hum. Genet.70, 459-487, 2006.
Slavic Macedonians	"	200	Zimmermann, Forensic Sci Int Genet 1, e4-e9, 2007.
Slovenian		104	Malyarchuk, Ann. Hum. Genet. 67, 412-425, 2003.
<u>Caucasus</u>			
Abkazian		27	Nasidze, Ann. Hum. Genet. 68, 205-21, 2004.
Adegei		50	Macaulay, Am J. Hum. Genet. 64:232-249, 1999.
Armenian		191	Richards, Am. J. Hum. Genet. 67, 1251-1276, 2000.
Azeri	Azeri	39	Nasidze, Ann. Hum. Genet. 68, 205-21, 2004.

Azeri	“	30	Schonberg, Eur. J. Genet. 19, 988-994, 2011.
Azeri	“	51	Richards, Am. J. Hum. Genet. 67, 1251-1276, 2000.
Caucasus		57	Quintana-Murci, Am. J. Hum. Genet. 74, 827-245, 2004.
Georgian	Georgian	57	Nasidze, Proc. R. Soc., 268, 1197-1206, 2001.
Georgian	“	179	Reidla, Genbank Accession numbers AJ389197-AJ389375.
Georgian	“	28	Schonberg, Eur. J. Hum. Genet. 19, 988-994, 2011.

Central Europe

Austrian		117	Parson, Int. J. Legal Med., 111, 124-132, 1998.
German	German	140	Richards, Am. J. Hum. Genet. 59, 185-203, 1996.
Bavarian	“	49	Richards, Am. J. Hum. Genet. 59, 185-203, 1996.
Swiss		153	Dimo-Simonin, Int. J. Legal Med., 113, 89-97, 2000.

North Eastern Europe

Slovakians		374	Lehocky, Forensic Sci. Int. Genet. 2, e53-e59, 2008.
Czech		178	Malyarchuk, Hum Biol, 78, 681,196. 2008
Polish		436	Malyarchu, Ann Hum Genet 66, 261-283, 2002
Russian		201	Malyarchuk, Ann Hum Genet 66, 261-283, 2002

Western Mediterranean Islands

Balearic Islands		67	Falchi, J. Hum. Genet. 51, 9-14, 2006.
Corsican	Corsican	46	Varesi, Am. J. Hum. Biol. 12, 339-351, 2000.
South Corsican	“	53	Falchi, J. Hum. Genet. 51, 9-14, 2006.
Central Sardinia	Sardinian	51	Falchi, J. Hum. Genet. 51, 9-14, 2006.
North Sardinia	“	50	Falchi, J. Hum. Genet. 51, 9-14, 2006.
San Pietro South Sardinia	“	44	Falchi, J. Hum. Genet. 51, 9-14, 2006.
San Antioco South Sardinia	“	42	Falchi, J. Hum. Genet. 51, 9-14, 2006.
Sardinian-Trexenta	“	69	Richards, Am. J. Hum. Genet. 59:185-203, 1996.
Sardinian-Trexenta	“	47	Falchi, J. Hum. Genet. 51, 9-14, 2006.
Sciaccia-West Sicilian	Sicilian	80	Forster, Int. J. Legal Med. 116, 99-108, 2002.
Sicilian	“	154	Ottoni, Annals Hum. Biol., 36, 785-811, 2010.

Sicilian	“	49	Vona, Am. J. Hum. Biol., 13, 576-589 2001.
<u>Middle East</u>			
Druze Israel	Druze	45	Macaulay, Am. J. Hum. Genet. 64, 232-449, 1999.
Druze North Israel	“	311	Shlush, PloS ONE, 3, e2105, 2008.
Dubai		248	Alshamali, For. Sci. Inter.: Gen2. e9-e10, 2008.
Iranian	Iranian	436	Metspalu, BMC Genetics, 5:26, 2004.
Iranian-Arabs	“	46	Nasidze, Ann. Hum. Genet. 72, 241-253, 2008.
Iranian-Bakhtiari	“	53	Nasidze, Ann. Hum. Genet. 72, 241-253, 2008.
Iranian-Isfahan	“	46	Nasidze, Ann. Hum. Genet. 68, 205-221, 2004.
Iranian-North	“	31	Terreros, J. Hum. Genet. 56, 235-246, 2011.
Iranian-South	“	116	Terreros, J. Hum. Genet. 56, 235-246, 2011.
Iranian-Tehran	“	80	Nasidze, Ann. Hum. Genet. 68, 205-221, 2004.
Iranian-Tehran	“	30	Schonberg, Eur. J. Hum. Genet. 19,988-994, 2011.
Iraqi	Iraqi	115	Richards, Am. J. Hum. Genet. 67, 1251, 2000.
Iraqi	“	174	Al-Zahery, BMC Evolutionary Biol.11, 288, 2011.
Iraq-Marsh Arabs	“	144	Al-Zahery, BMC Evolutionary Biol.11, 288, 2011.
Jordanian-Amman	Jordanian	101	Gonzalez, Ann. Hum. Biol., 35, 212-231, 2008.
Jordanian-Dead Sea	“	44	Gonzalez, Ann. Hum. Biol., 35, 212-231, 2008.
Kurds- Kurmanji	Kurdish	51	Nasidze, Annals of Human Genetics. 69: 401-412, 2005
Kurds-E.Turkey	“	54	Richards, Am. J. Hum. Genet. 67, 1251-1276, 2000.
Kurds-Georgia	“	29	Comas, Am J. Phys. Anth. 112, 5-16, 2000.
Kurds-Turkmen	“	32	Quintana-Murci, Am J. Hum. Genet. 74, 827-284,2004.
Kurds-W.Iran	“	20	Quintana-Murci, Am J. Hum. Genet. 74, 827-284,2004.
Kurds-Zazaki	“	27	Nasidze, Annals of Human Genetics. 69: 401-412, 2005.
Lebanese		363	Haberl, Ann Hum. Genet. 76, 1-8, 2012.
Palestinian		117	Richards, Am. J. Hum. Genet. 67, 1251, 2000.
Saudi		553	Abu-Amero, BMC Evolu. Biol. 8, Spec. Sec. 1-15, 2008.
Syrian	Syrian	49	Venesi, PNAS, 98, 13460, 2001.
Syrian Damascus	Syrian	69	Richards, Am. J. Hum. Genet. 67, 1251, 2000.
Yemenite		115	Kivisild. Am. J. Hum. Genet. 75, 752-770, 2004.

North Africa

Egypt	Egyptian	94	Krings, Am J. Hum. Genet. 64, 1166-1176, 1999.
Upper Egypt	"	57	Stevanovitch Ann. Hum. Genet. 68, 23-39, 2003
Egypt-Alexandria	"	277	Saunier, Forensic Sci. Int. Genet. 3,397-103, 2009.
Libyan		269	Fadhlaoui-Zid, Am. J. Phys. Anthrop. 145,107-117, 2011
Morocco Central		55	Turchi, Forensic Sci. Int. Genet. 3, 166-172, 2009.
Nubian		83	Krings, Am J. Hum. Genet. 64, 1166-1176, 1999.
South Sudanese		76	Krings, Am J. Hum. Genet. 64, 1166-1176, 1999.
Tunisia Coast		64	Turchi, Forensic Sci. Int. Genet. 3, 166-172, 2009.

Northern Europe

English	English	100	Piercy, Int. J. Med. 106, 85-90, 1993.
English	"	142	Helgason, Am. J. Hum. Genet. 68, 723-737, 2001.
Irish		299	McEvoy, Am. J. Hum. Genet. 75, 693-702, 2004.
Wales		92	Richards, Am. J. Hum. Genet. 59, 185-203, 1996.

Southern Europe

Andalusian	Andalusian	108	Casa, Am J. Phys. Anthrop. 131, 539-551, 2006.
Andalusian	"	49	Plaza, Annals Hum. Genet. 67, 312-328, 2003.
Basque	Basque	61	Richards, 1996 Am. J. Hum. Genet. 59:185-203.
Basque	"	110	Cardoso, Am. J. Phys. Anthrop. 145, 480-488, 2011.
Basque	"	156	Richards, Am. J. Hum. Genet. 67, 1251-1276, 2000.
Spanish	Spanish	30	Richards, Am. J. Hum. Genet. 59:185-203, 1996.
North Eastern Spain	"	118	Crespillo, Int. J. Legal Med. 114, 130-132, 2000.
Catalan	Catalan	46	Plaza, Annals Hum. Genet. 67, 312-328, 2003.
Portuguese	Portuguese	54	Richards, 1996 Am. J. Hum. Genet. 59:185-203.
Italian	Italian	393	Turchi, Int. J. Legal Med. 122, 199-204, 2008.
Modern Tuscans	"	322	Achilli, Am. J. Hum. Genet. 80,759-768, 2007.

Turkish

Turkish-Ankara	Turkish	29	Schonberg, Eur. J. Hum. Genet. 19:988-994, 2011.
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Turkish	“	218	Richards, Am. J. Hum. Genet. 59:185-203, 2000.
Turkish	“	39	Nasidze, Proc. R. Soc. LondonB, 268, 1197-1206, 2001.
Turkish	“	72	DiBenedetto, Am. J. Phys. Anth., 114, 144-156, 2001.
Turkish	“	75	Mergen, J. Genet. 83, 39-47, 2004.
Turkish-Konya	“	50	Quintana-Murci, Am. J. Hum Genet. 74,827-845, 2004.

Western Europe

French	French	111	Cali, Int. J. Legal. Med. 114:229-231, 2001.
French	“	210	Dubut, Eur. J. Hum. Genet. 12, 293-300, 2004.

Ancient

Bronze Age Etruscans		23	Vernesi, Am. J. Hum. Genet. 74, 694-704, 2004.
Bronze Age Iberians		17	Sampietro, Annals Hum. Genet. 69,535-548, 2005.
Bronze Age Sardinians		23	Caramelli, J. Hum. Genet. 122, 327-336, 2007.
Byzantine Period Sagalassos		53	Ottoni, J. Hum. Genet. 19, 571-576, 2011.
Medieval Iron Age Nordic		53	Melchior, Plos One, 5, e11898,2010
Neolithic LBK Era Germany		42	Haak, PLS Biology, 8, 1-16, 2010.
Neolithic Era Hungary		11	Guba, J. Hum. Genet. 56, 784-796, 2011.
Neolithic Post LMBG Era Germany		20	Bramanti, Science 326, 137-140, 2009.
Neolithic Era Scandinavia		22	Malstrom, Current Biol, 19, 1758-1762, 2009.
Neolithic Era Iberia		13	Gamba, Mol. Ecology, 21, 45-56, 2012.
Neolithic Era Treilles		29	Lacan, PNAS, 108, 9788-9791, 2011.

Greeks

Attica		30	Vernesi, PNAS,98,13460, 2001
Various Greeks		54	Kouvatsi, Hum. Biol. 73, 855-869, 2001.
Argolis		15	Forster, Int. J. Legal Med. 116, 99-108, 2002.
EastMacedonia/Thrace		13	Forster, Int. J. Legal Med. 116, 99-108, 2002.
Euboea		15	Forster, Int. J. Legal Med. 116, 99-108, 2002.
Laconia		15	Forster, Int. J. Legal Med. 116, 99-108, 2002.

EastMacedonia/Thrace	25	Bosch, <i>Annals Hum. Genet.</i> 70, 459-487, 2006.
Macedonia	319	Irwin, <i>Int J. Legal Med.</i> , 122, 87-89, 2008.
Thessaloniki Sarakatsanoi	127	Richards, <i>Am J. Hum. Genet.</i> 67, 1251-1276, 2000.
Greece-Chios	15	Forster, <i>Int. J. Legal Med.</i> 116, 99-108, 2002.
Crete1	18	Vernesi, <i>PNAS</i> , 98, 13460, 2001.
Crete2	186	Villens, Direct submission (ed. Gen Bank). Unpublished, Estonia, Tartu University, 1999.
Eastern Crete	10	Forster, <i>Int. J. Legal Med.</i> 116, 99-108, 2002.
Heraklion/LasithiPrefecture	170	Martinez, <i>J. Phys. Anthropol.</i> , 137, 213-223, 2008.
LasithiPlateau	112	Martinez, <i>Am. J. Phys. Anthr.</i> 137, 213-223, 2008.
Cypriot	91	Irwin, J. et al, <i>Int J. Legal Med.</i> , 122, 87-89, 2008.

In our analysis, we consolidated individuals from the modern populations to the population groups shown in the second column, by grouping together individuals from the same ethnic group. Sample sizes and references for each of the 135 original populations are shown. Greek populations were not consolidated in order to better explore their affinity to the Minoans.

Supplementary Table S5. Average Pairwise Differences.

Population	Pairwise differences
Bronze-Sardinian	2.75111
Bronze-Iberians	3.24096
Corsican	3.83114
Greece-Laconia	3.84713
Portuguese	3.85267
Greece-Euboea	3.89308
Neolithic-Scandinavian	3.90312
German	3.97586
French	3.991
Neolithic-Treilles	3.99965
Catalan	4.01067
Croatian	4.03179
Bosnian	4.03938
Irish	4.05102
English	4.06375
Albanian	4.08172
Neolithic-Iberian	4.12684
Slovenian	4.1371
Crete2	4.1415
Greece-Sarakatsanoi	4.15212
Greece-Argolis	4.15894
Greece-Attica	4.17259
Crete1	4.20634
Romanian-Bulgarian	4.21024
Andalusian	4.24439
Bulgarian	4.26281
Aromuns	4.27149
Slovakian	4.27653
Austrian	4.27957
Greece-Chios	4.29069
BalearicIslands	4.29613
Greece-Macedonia	4.30082
Medieval-IronAge-Nordic	4.30343
Spanish	4.3083
Sardinian	4.31216
Greece-Variou	4.32986
SlavicMacedonian	4.33332
Czech	4.35326

Romanian	4.37123
Swiss	4.39357
Greece-EastMacedonia/Thrace	4.41306
Polish	4.44768
LasithiPlateau	4.44937
Russian	4.45643
Neolithic-PostLMBG-German	4.49029
Sicilian	4.50864
Adygei	4.52689
Turkish	4.538
Bronze-Etruscans	4.54551
Lebanon	4.55165
Cyprus	4.65297
Druze	4.65832
Serbian	4.66225
Neolithic-LBK-German	4.69643
Neolithic-Hungarian	4.72494
Byzantine-Sagalassos	4.74833
Armenian	4.81578
Heraklion-LasithiPrefecture	4.84504
Syrian	4.85907
Jordanian	4.89009
Kurdish	4.92096
Azeri	5.01008
Caucasus	5.01728
Palestinian	5.01778
Abkhazian	5.04025
EasternCrete	5.10694
Italian	5.13788
Iraqi	5.29132
Georgian	5.29356
British	5.42024
Moroccan	5.43876
Iranian	5.4563
Libyan	5.49977
Egypt-Alexandria	5.54634
Dubai	5.55729
Basque	5.66452
Tunisian-Coast	5.6975
Saudi	5.9212
Yemenite	6.2097
Egyptian	6.49345
Egypt	6.92114

Nubia	7.08567
SouthSudanese	7.81632

Average number of pairwise differences between populations in our dataset (in increasing order) between the Minoans, the modern population groups and ancient and Neolithic populations. Computations were performed using Arlequin v3.5.1.3.

Supplementary Table S6. Nearest neighbors of the Minoan population in the PCA plot.

Population	Distance
Lasithi Plateau	0.002
Serbian	0.002
Bronze-Sardinian	0.004
Neolithic-Scandinavian	0.006
Adygei	0.007
Neolithic-Treilles	0.007
Greece-Euboea	0.009
Heraklion-LasithiPrefecture	0.009
Georgian	0.01
Greece-Chios	0.01
Azeri	0.011
Greece-Laconia	0.011
Portuguese	0.012
Cyprus	0.012
Sardinian	0.012
Iranian	0.012
Byzantine-Sagalassos	0.013
Crete1	0.013
Bronze-Iberians	0.014
Spanish	0.015
Greece-Attica	0.015
Austrian	0.017
Albanian	0.018
Greece-Argolis	0.018
Greece-Various	0.018
Italian	0.019
Greece-EastMacedonia/Thrace	0.019
Caucasus	0.019
Balearic Islands	0.02
Corsican	0.021
Medieval-Iron Age-Nordic	0.021
Crete2	0.022
German	0.022
Iraqi	0.022
Neolithic-LBK-German	0.023
Kurdish	0.023
Aromuns	0.023
Armenian	0.023

Catalan	0.024
Croatian	0.024
Druze	0.024
Palestinian	0.025
Syrian	0.026
Jordanian	0.027
Greece-Macedonia	0.027
Andalusian	0.027
English	0.029
Romanian	0.03
Slovenian	0.031
Basque	0.031
Swiss	0.031
Neolithic-Iberian	0.031
Lebanon	0.032
Libyan	0.033
French	0.033
Russian	0.034
Czech	0.035
Bosnian	0.035
Sicilian	0.035
Neolithic-PostLMBG-German	0.036
Turkish	0.036
Greece-Sarakatsanoi	0.036
Polish	0.036
Irish	0.036
Slavic Macedonian	0.037
Romanian-Bulgarian	0.037
Abkhazian	0.038
Slovakian	0.039
Saudi	0.04
Dubai	0.041
Egypt-Alexandria	0.041
Bronze-Etruscans	0.042
Bulgarian	0.042
Moroccan	0.046
Tunisian-Coast	0.056
Eastern Crete	0.057
Neolithic-Hungarian	0.073
British	0.083
Yemenite	0.088
Egyptian	0.098
Egypt	0.102

Nubia	0.134
South Sudanese	0.184

All populations were sorted with respect to the (Euclidean) distances from the Minoan population in the two- dimensional PCA plot.

Supplementary Table S7. Shared Minoan Haplotypes.

Haplotype	Haplogroup	Population	Haplotype frequency (out of 100%)
1	T2	Minoans	2.7
1	T2	Portuguese	1.85
1	T2	German	1.06
1	T2	Spanish	0.68
2	W	Minoans	2.7
3	T5	Minoans	2.7
4	T2	Neolithic-Treilles	6.9
4	T2	Crete2	5.91
4	T2	Croatian	5.17
4	T2	Neolithic-Scandinavian	4.55
4	T2	Lasithi Plateau	4.46
4	T2	Swiss	3.27
4	T2	Polish	2.98
4	T2	Slovenian	2.88
4	T2	Minoans	2.7
4	T2	Greece-EastMacedonia/Thrace	2.63
4	T2	French	2.49
4	T2	Neolithic-LBK-German	2.38
4	T2	Slavic Macedonian	2.11
4	T2	Irish	2.01
4	T2	Adygei	2
4	T2	Medieval-Iron Age-Nordic	1.89
4	T2	Portuguese	1.85
4	T2	Greece-Various	1.85
4	T2	Basque	1.83
4	T2	Azeri	1.67
4	T2	English	1.65
4	T2	Russian	1.49
4	T2	Libyan	1.49
4	T2	Albanian	1.19
4	T2	Czech	1.12
4	T2	German	1.06
4	T2	Corsican	1.01
4	T2	Italian	0.98

4	T2	Palestinian	0.85
4	T2	Austrian	0.85
4	T2	Syrian	0.85
4	T2	Sicilian	0.71
4	T2	Bosnian	0.68
4	T2	Spanish	0.68
4	T2	Iranian	0.6
4	T2	Bulgarian	0.58
4	T2	Slovakian	0.53
4	T2	Romanian-Bulgarian	0.43
4	T2	Georgian	0.38
4	T2	Sardinian	0.33
4	T2	Greece-Macedonia	0.31
5	T2	Greece-Chios	6.67
5	T2	Greece-Argolis	6.67
5	T2	British	6.52
5	T2	Minoans	5.41
5	T2	Caucasus	3.51
5	T2	Basque	3.06
5	T2	Greece-EastMacedonia/Thrace	2.63
5	T2	Swiss	2.61
5	T2	Neolithic-LBK-German	2.38
5	T2	Aromuns	2.29
5	T2	Adygei	2
5	T2	Kurdish	1.88
5	T2	Austrian	1.71
5	T2	Slovakian	1.34
5	T2	Greece-Macedonia	1.25
5	T2	Turkish	1.24
5	T2	Georgian	1.14
5	T2	Sicilian	1.06
5	T2	Armenian	1.05
5	T2	Russian	1
5	T2	Slovenian	0.96
5	T2	Palestinian	0.85
5	T2	Syrian	0.85
5	T2	Azeri	0.83
5	T2	English	0.83
5	T2	Greece-Sarakatsanoi	0.79
5	T2	Iraqi	0.69
5	T2	Jordanian	0.69
5	T2	Sardinian	0.66
5	T2	Iranian	0.6

5	T2	Heraklion-LasithiPrefecture	0.59
5	T2	Lebanon	0.55
5	T2	Crete2	0.54
5	T2	Polish	0.46
5	T2	Italian	0.42
5	T2	Bulgarian	0.35
5	T2	Irish	0.33
5	T2	French	0.31
6	T3	Minoans	2.7
6	T3	Corsican	1.01
6	T3	Sardinian	0.99
6	T3	Palestinian	0.85
6	T3	Jordanian	0.69
6	T3	Aromuns	0.57
6	T3	German	0.53
6	T3	Romanian-Bulgarian	0.43
6	T3	Italian	0.42
6	T3	Turkish	0.41
6	T3	Saudi	0.36
6	T3	French	0.31
6	T3	Iranian	0.12
7	T1	Minoans	2.7
7	T1	Heraklion-LasithiPrefecture	0.59
8	I5	Minoans	8.11
8	I5	Bosnian	2.38
8	I5	Druze	1.12
8	I5	Slovenian	0.96
8	I5	Romanian-Bulgarian	0.43
8	I5	Sardinian	0.33
8	I5	Lebanon	0.28
8	I5	Bulgarian	0.23
8	I5	Iranian	0.12
9	X	Minoans	2.7
10	H	Minoans	2.7
10	H	Armenian	2.09
10	H	Romanian	0.95
10	H	Syrian	0.85
10	H	Spanish	0.68
10	H	Andalusian	0.64
10	H	French	0.62
10	H	Lebanon	0.55
10	H	Iraqi	0.46
10	H	English	0.41

10	H	Italian	0.14
11	K	Neolithic-Iberian	23.08
11	K	Cyprus	9.89
11	K	Minoans	8.11
11	K	Neolithic-Treilles	6.9
11	K	Greece-Argolis	6.67
11	K	Bronze-Iberians	5.88
11	K	Byzantine-Sagalassos	5.66
11	K	Neolithic-PostLMBG-German	5
11	K	French	4.98
11	K	Neolithic-LBK-German	4.76
11	K	Irish	4.68
11	K	Lasithi Plateau	4.46
11	K	German	4.23
11	K	Druze	4.21
11	K	Kurdish	3.76
11	K	Portuguese	3.7
11	K	Greece-Various	3.7
11	K	Abkhazian	3.7
11	K	Armenian	3.66
11	K	Lebanon	3.58
11	K	Heraklion-LasithiPrefecture	3.53
11	K	Italian	3.5
11	K	Greece-Attica	3.33
11	K	English	3.31
11	K	Andalusian	3.18
11	K	Bosnian	3.06
11	K	Sicilian	2.83
11	K	Greece-EastMacedonia/Thrace	2.63
11	K	Swiss	2.61
11	K	Romanian-Bulgarian	2.58
11	K	Russian	2.49
11	K	Albanian	2.38
11	K	Czech	2.25
11	K	British	2.17
11	K	Crete2	2.15
11	K	Egypt	2.13
11	K	Turkish	2.07
11	K	Sardinian	1.98
11	K	Romanian	1.9
11	K	Medieval-Iron Age-Nordic	1.89
11	K	Bulgarian	1.87
11	K	Libyan	1.86

11	K	Moroccan	1.82
11	K	Palestinian	1.71
11	K	Syrian	1.69
11	K	Slavic Macedonian	1.69
11	K	Greece-Sarakatsanoi	1.57
11	K	Greece-Macedonia	1.57
11	K	Basque	1.53
11	K	Jordanian	1.38
11	K	Polish	1.38
11	K	Slovakian	1.34
11	K	Iranian	1.19
11	K	Aromuns	1.14
11	K	Egypt-Alexandria	1.08
11	K	Corsican	1.01
11	K	Slovenian	0.96
11	K	Iraqi	0.92
11	K	Saudi	0.9
11	K	Austrian	0.85
11	K	Azeri	0.83
11	K	Dubai	0.81
11	K	Georgian	0.76
11	K	Spanish	0.68
12	H5	Slovenian	7.69
12	H5	British	7.61
12	H5	Crete1	5.56
12	H5	Bosnian	5.1
12	H5	Catalan	4.35
12	H5	Aromuns	4
12	H5	Greece-Various	3.7
12	H5	Romanian-Bulgarian	3.43
12	H5	Greece-Attica	3.33
12	H5	Crete2	3.23
12	H5	Greece-Sarakatsanoi	3.15
12	H5	Tunisian-Coast	3.13
12	H5	Romanian	2.86
12	H5	Czech	2.81
12	H5	Minoans	2.7
12	H5	French	2.49
12	H5	Russian	2.49
12	H5	Sicilian	2.47
12	H5	Bulgarian	2.46
12	H5	Albanian	2.38
12	H5	Cyprus	2.2

12	H5	Slavic Macedonian	2.11
12	H5	Polish	2.06
12	H5	Medieval-Iron Age-Nordic	1.89
12	H5	Greece-Macedonia	1.88
12	H5	Slovakian	1.87
12	H5	Turkish	1.86
12	H5	Basque	1.83
12	H5	Italian	1.82
12	H5	Lasithi Plateau	1.79
12	H5	Heraklion-LasithiPrefecture	1.76
12	H5	Croatian	1.72
12	H5	Palestinian	1.71
12	H5	Iraqi	1.62
12	H5	German	1.59
12	H5	Spanish	1.35
12	H5	Swiss	1.31
12	H5	English	1.24
12	H5	Armenian	1.05
12	H5	Sardinian	0.99
12	H5	Syrian	0.85
12	H5	Azeri	0.83
12	H5	Lebanon	0.83
12	H5	Jordanian	0.69
12	H5	Irish	0.67
12	H5	Kurdish	0.47
12	H5	Georgian	0.38
12	H5	Libyan	0.37
12	H5	Saudi	0.36
12	H5	Egypt-Alexandria	0.36
12	H5	Iranian	0.24
13	HV	Neolithic-LBK-German	9.52
13	HV	Neolithic-Scandinavian	9.09
13	HV	Minoans	8.11
13	HV	Lasithi Plateau	8.04
13	HV	Greece-Laconia	6.67
13	HV	Greece-Argolis	6.67
13	HV	Albanian	5.95
13	HV	Serbian	5.56
13	HV	Greece-Various	5.56
13	HV	Greece-EastMacedonia/Thrace	5.26
13	HV	Bosnian	5.1
13	HV	Romanian	4.76
13	HV	Bronze-Sardinian	4.35

13	HV	Bronze-Etruscans	4.35
13	HV	German	4.23
13	HV	Aromuns	4
13	HV	Slavic Macedonian	3.8
13	HV	Abkhazian	3.7
13	HV	Heraklion-Lasithi Prefecture	3.53
13	HV	Bulgarian	3.51
13	HV	Croatian	3.45
13	HV	Corsican	3.03
13	HV	Romanian-Bulgarian	3
13	HV	Sardinian	2.97
13	HV	Greece-Macedonia	2.82
13	HV	Georgian	2.65
13	HV	Iraqi	2.54
13	HV	French	2.49
13	HV	Greece-Sarakatsanoi	2.36
13	HV	Kurdish	2.35
13	HV	Italian	2.24
13	HV	Catalan	2.17
13	HV	British	2.17
13	HV	Jordanian	2.07
13	HV	Spanish	2.03
13	HV	Adygei	2
13	HV	Slovenian	1.92
13	HV	Medieval-Iron Age-Nordic	1.89
13	HV	Slovakian	1.87
13	HV	Turkish	1.86
13	HV	Portuguese	1.85
13	HV	Polish	1.83
13	HV	Moroccan	1.82
13	HV	Sicilian	1.77
13	HV	Caucasus	1.75
13	HV	Austrian	1.71
13	HV	Syrian	1.69
13	HV	Czech	1.69
13	HV	Azeri	1.67
13	HV	Swiss	1.31
13	HV	Andalusian	1.27
13	HV	Basque	1.22
13	HV	Iranian	1.19
13	HV	Cyprus	1.1
13	HV	Armenian	1.05
13	HV	Russian	1

13	HV	Palestinian	0.85
13	HV	Lebanon	0.83
13	HV	English	0.83
13	HV	Saudi	0.72
13	HV	Irish	0.67
13	HV	Druze	0.56
14	H	Bronze-Sardinian	47.83
14	H	Catalan	28.26
14	H	Neolithic-Hungarian	27.27
14	H	Portuguese	25.93
14	H	British	25
14	H	Sardinian	22.44
14	H	Crete1	22.22
14	H	Minoans	21.62
14	H	Balearic Islands	20.9
14	H	Neolithic-Treilles	20.69
14	H	Basque	20.49
14	H	Corsican	20.2
14	H	Greece-Euboea	20
14	H	Austrian	19.66
14	H	Andalusian	19.11
14	H	Irish	18.73
14	H	Moroccan	18.18
14	H	Polish	16.97
14	H	Albanian	16.67
14	H	English	16.53
14	H	Spanish	16.22
14	H	Adygei	16
14	H	Sicilian	15.9
14	H	French	15.58
14	H	Italian	15.1
14	H	Czech	14.61
14	H	Lebanon	14.6
14	H	Lasithi Plateau	14.29
14	H	German	14.29
14	H	Crete2	13.98
14	H	Slovakian	13.9
14	H	Swiss	13.73
14	H	Turkish	13.66
14	H	Slovenian	13.46
14	H	Russian	13.43
14	H	Greece-Attica	13.33
14	H	Greece-Argolis	13.33

14	H	Greece-EastMacedonia/Thrace	13.16
14	H	Romanian	12.38
14	H	Slavic Macedonian	12.24
14	H	Heraklion-LasithiPrefecture	11.76
14	H	Bosnian	11.56
14	H	Bulgarian	11.46
14	H	Jordanian	11.03
14	H	Tunisian-Coast	10.94
14	H	Kurdish	10.33
14	H	Romanian-Bulgarian	10.3
14	H	Greece-Sarakatsanoi	10.24
14	H	Druze	10.11
14	H	Greece-Macedonia	10.03
14	H	Eastern Crete	10
14	H	Neolithic-LBK-German	9.52
14	H	Greece-Various	9.26
14	H	Aromuns	9.14
14	H	Cyprus	8.79
14	H	Caucasus	8.77
14	H	Croatian	8.62
14	H	Iranian	8.35
14	H	Libyan	8.18
14	H	Armenian	7.85
14	H	Neolithic-Iberian	7.69
14	H	Syrian	7.63
14	H	Georgian	7.58
14	H	Medieval-Iron Age-Nordic	7.55
14	H	Byzantine-Sagalassos	7.55
14	H	Egypt-Alexandria	6.86
14	H	Palestinian	6.84
14	H	Greece-Laconia	6.67
14	H	Greece-Chios	6.67
14	H	Bronze-Iberians	5.88
14	H	Serbian	5.56
14	H	Egypt	5.32
14	H	Egyptian	5.26
14	H	Neolithic-PostLMBG-German	5
14	H	Iraqi	4.85
14	H	Neolithic-Scandinavian	4.55
14	H	Bronze-Etruscans	4.35
14	H	Azeri	4.17
14	H	Abkhazian	3.7
14	H	Dubai	3.63

14	H	Saudi	2.71
14	H	Yemenite	2.61
14	H	Nubia	1.2
15	H	Minoans	2.7
16	H	Minoans	2.7
16	H	Spanish	0.68
16	H	Crete2	0.54
16	H	Dubai	0.4
16	H	Libyan	0.37
16	H	Italian	0.28
16	H	Iranian	0.12
17	H	Minoans	2.7
17	H	Corsican	1.01
17	H	Basque	0.61
17	H	Polish	0.23
17	H	Bulgarian	0.12
18	U5a	Adygei	4
18	U5a	Minoans	2.7
18	U5a	Croatian	1.72
18	U5a	Austrian	0.85
18	U5a	Druze	0.84
18	U5a	Azeri	0.83
18	U5a	Georgian	0.76
18	U5a	Jordanian	0.69
18	U5a	Lebanon	0.55
18	U5a	Slovakian	0.53
18	U5a	Romanian-Bulgarian	0.43
18	U5a	Slavic Macedonian	0.42
18	U5a	Greece-Macedonia	0.31
18	U5a	Iranian	0.12
19	U	Minoans	2.7
20	K	Minoans	8.11
20	K	Turkish	0.21
21	J2	Minoans	2.7

The first column of the table indicates the number of the haplotype (out of 21 distinct haplotypes observed in the 37 Minoan samples), the second column indicates the haplogroup, the third column indicates a population where the haplotype appears, and the fourth column indicates the haplotype frequency in the respective population (out of 100%).