** S16264 Haplotypes - Imported from FTDNA as Text. ** Updated 04 February 2018 **

Sort Sequence	Source Project	Most Recent Tested SNPs (tested by FTDNA except where noted) NGS Tests are: {BY} FTDNA BigY; {FGC} Full Genomes Corp	S16264 Branch and SNP Clade	ySearch ID	ySeq ID	Kit Number	Paternal Ancestor Name	Country	FTDNA Assigned Haplogroup	DYS393	DYS390	DYS19	DYS391	DYS385	DYS426	DYS388	DYS439	DYS389i	DYS392	DYS389ii
									Rate Class ->	S	M	M	M	M	V	V	F	M	S	M
										1	2	3	4	5/6	7	8	9	10	11	12
							P312 MODAL (for Reference)			**13**	**24**	**14**	**11**	**11-14**	**12**	**12**	**12**	**13**	**13**	**29**
1			#1 L679- (NG)																	
2	L21 - page 6	S16264+	#1 L679- (NG)	HFXUK		318851	Noël Grouazel, Pleslin-Trigavou, Brittany b.1675	France	R-S16264	13	25	16	11	11-15	12	12	12	13	13	29
3	n/a	S16264+, S21225+ (YSeq)	#1 L679- (NG)		493	n/a	Ronan Grouazel	France	n/a											
4			#2 L679- (JH)																	
5	L21 - page 1	S16264+, S21225+, L679- {BY}	#2 L679- (JH)	VVZ2M		N85335	John Hawk, b. abt. 1765 d. 1833	Unknown Origin	R-S16264	13	23	16	11	11-14	12	12	12	13	13	28
6	ySearch		#2 L679- (JH)	F2Z9C		n/a	John Hawk, b. abt. 1765 d. 1833	Unknown Origin	n/a	13	23	16	11	11-14	12	12	12	13	13	28
7	Hawk		#2 L679- (JH)	WABA6		2091	Jacob Hawk	Unknown Origin	R-M269	13	23	16	11	11-14	12	12	12	13	13	28
8	Hawk		#2 L679- (JH)	6EQYD		17549	Hock	Unknown Origin	R-M269	13	23	16	11	11-14	12	12	12	13	13	28
9	Hawk		#2 L679- (JH)	HUV96		17449	Jacob Hawk, b. abt. 1760	Unknown Origin	R-M269	13	23	16	11	11-14	12	12	12	13	13	28
10	Hicks		#2 L679- (JH)			248095	John Hicks b 1455 d 1492	England	R-M269	13	23	16	11	11-14	12	12	12	13	13	28
11			#4 L679- (Co)																	
12	Cullison	S16264+	#4 L679- (Co)	T558P		527028	James Collison, b. 1776 and d. 1816	England	R-S16264	13	24	16	10	11-14	12	12	11	13	13	30
13		Z16861+, Z16866+, Z16870+, Z16874-, L679-	#3 L679- (Ma)																	
14	Mann	S16264+	#3 L679- (Ma)			247104	Mann	United States	R-S16264	13	24	15	10	12-14	12	12	11	13	13	29
15	Mann		#3 L679- (Ma)	NMZE3		H1262	Mann	England	R-M269	13	23	15	10	12-14	12	12	11	13	13	29
16	Mann	Z16861+, Z16866+, Z16870+, Z16874-, L679- (YSeq)	#3 L679- (Ma)	RE3P5	9477	N26061	Mann	Unknown Origin	R-M269	13	24	15	10	12-14	12	12	11	13	13	29
17			#3 L679? (Mi)	*L679 STATUS UNKNOWN (expected to be L679-)*																
18	Mills	S16264+	#3 L679? (Mi)			530133	Thomas Mills, b. 1786 and d. 1857	United Kingdom	R-S16264	13	24	16	10	12-15	12	12	12	13	13	29
19	Mills		#3 L679? (Mi)			42077	John T. Mills, b. 1865, GA	United Kingdom	R-M269	13	24	16	10	12-15	12	12	12	14	13	30
20	Mills		#3 L679? (Mi)			328916	David G. Mills, b. 1825 Georgia, d. 1869 Florida	Unknown Origin	R-M269	13	24	16	10	12-15	12	12	12	14	13	30
21	Mills		#3 L679? (Mi)			22163	Thomas Mills, b. 1775 North Carolina	Unknown Origin	R-M269	13	24	16	10	12-15	12	12	12	14	13	30
22	Mills		#3 L679? (Mi)			66562	Thomas Mills b.1775, Montgomery, NC	England	R-M269	13	24	16	10	12-15	12	12	13	14	13	30
23	Mills		#3 L679? (Mi)			89436	Mills	England	R-M269	13	24	16	10	12-15	12	12	12	14	13	30
24			#3 L679? (De)	*L679 STATUS UNKNOWN (expected to be L679-)*																
25	Gen-of-Mexico	S16264+	#3 L679? (De)	C5WS7		294849	Jose Espiririon Delgado, b. 1893 and d. 1963	Unknown Origin	R-S16264	13	24	16	10	12-14	12	12	12	14	13	30
26			#3 ???	*Likely S16264+ and L679- but not tested*																
27	ySearch		#3 L679? (Ar)	9AJ9F			Pedro Arroyo	Mexico		13	24	16	10	12-14	12	12	12	13	13	29
28		Z16874-, L679-	#3 L679- (PL)																	
29	L21 - page 2	S16264+, S21225+, Z16874- (YSeq), L679-	#3 L679- (PL)	Z89FP	751	162326	Pierre Leprovost, b. c. 1580, Manche, France	France	R-L21	13	24	16	10	12-14	12	12	12	13	13	29
30		Z16861+, Z16866+, Z16870+, Z16874+, L679+, F110+, A7314-	#3 L679+	*L679+ is most closely related to L679- (PL). This subgroup is F110+ FGC36619+ A7314-.*																
31	R1b - page 21	L679+, A7314-, F110+, FGC36618-, FGC36619+, FGC36620- (YSeq)	#3 L679+		8966	529106	George Britt/Brett, Dewlish, Dorset	England	R-M269	12	24	15	10	12-14	12	12	12	13	13	29
32	Turner-01-35	L679+, A7314-, F110+, FGC36618+, FGC36619+, FGC36620+ {BY}	#3 L679+	YCCXK	109	170191	John Bond (NPE Braginton) 1846 - 1898 Hartland, Devon	United Kingdom	R-F110	12	24	15	10	11-14	12	12	13	13	13	29
33	"Salmon Turners"	Z16861+, Z16866+, Z16870+, Z16874+, L679+, F110-, A7314+	#3 L679+	*L679+ is most closely related to L679- (PL). All below expected to be F110- and A7314+ but not proven for all.*																
34	Turner-01-04		#3 L679+			197711	Bishop	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
35	Turner-01-02		#3 L679+			37297	Wm Turner c1794 SC d1850-60 Greenville, SC>Elias b1828	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	12	13	13	29
36	Turner-01-29		#3 L679+			385687	Samuel Turner bc1812 SC dc1862 TX m Emily Midkiff>Moses	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	14	13	13	29
37	Turner-01-05		#3 L679+			9926	Mathias 'Thias' Turner bc1767 PA d1851 NC>Nelson b1808	Scotland	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
38	Turner-01-06	L679+	#3 L679+			315770	William Hammond bc1783 Mecklenburg Co. NC d1853NC	Unknown Origin	R-L679	12	23	15	10	12-14	12	12	13	13	13	29
39	Turner-01-07		#3 L679+			33454	Wm Turner d bef 1815 Wilkes Co. GA>Luke b1796 GA d 1857	Unknown Origin	R-P25	12	23	15	10	12-14	12	12	13	13	13	29
40	Turner-01-08		#3 L679+			72075	John Turner d1813 Spart'burg Co. SC m Rebecca>Mathias	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	13	13	13	29

** S16264 Haplotypes - Imported from FTDNA as Text. ** Updated 04 February 2018 **

										Rate Class ->	S	M	M	M	M	V	V	F	M	S	M
											1	2	3	4	5/6	7	8	9	10	11	12
							P312 MODAL (for Reference)				13	24	14	11	11-14	12	12	12	13	13	29
Sort Sequence	Source Project	Most Recent Tested SNPs (tested by FTDNA except where noted) NGS Tests are: {BY} FTDNA BigY; {FGC} Full Genomes Corp	S16264 Branch and SNP Clade	ySearch ID	ySeq ID	Kit Number	Paternal Ancestor Name	Country	FTDNA Assigned Haplogroup	DYS393	DYS390	DYS19	DYS391	DYS385	DYS426	DYS388	DYS439	DYS389i	DYS392	DYS389ii
41	Turner-01-09		#3 L679+			10725	John Turner d1813 Spart'burg Co. SC m Rebecca>Mathias	Scotland	R-P25	12	23	15	10	12-14	12	12	13	13	13	29
42	Hood-H-77		#3 L679+			189981	Hood	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
43	Turner-01-10	S16264+, S21225+, L679+, A7314+, F110- {BY}	#3 L679+			311690	Daniel Turner b 1813 TN d1858 MO m Thurzah Wright	Unknown Origin	R-A7314	12	23	15	10	12-14	12	12	13	13	13	29
44	Turner-01-11	S16264+	#3 L679+			6150	Smith Turner (RWS) b 1750 VA d 1831 IN	Scotland	R-S16264	12	23	15	10	12-14	12	12	13	13	13	29
45	Turner-01-12	S16264+, S21225+, L679+, A7314+, F110- {FGC}	#3 L679+	EZDPT		B4810	Mark Hammond bc1610 Eng to VA 1634	England	R-L679	12	23	15	10	12-14	12	12	13	13	13	29
46	Turner-01-15		#3 L679+			173675	Elijah Turner b1772 NC d1859 Spart'burg Co. SC m Sarratt	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
47	Turner-01-16		#3 L679+			115137	Henry Leroy Turner c1808NC/SC d1865TN m Mrs.Blackwell	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
48	Turner-01-17		#3 L679+			116846	Mathias Turner b c1800 SC d c1872 AL m Nancy Billingsley	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
49	Turner-01-18		#3 L679+			118514	John Turner b 1786 SC d 1861 Cass Co. GA m Hettiah Rives	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
50	Turner-01-19		#3 L679+			17245	Samuel Turner d 1760 Worcester Co. MD	England	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
51	Turner-01-20		#3 L679+			26178	John D. Turner b1794 South Carolina dc1859 m.Charlotte	United Kingdom	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
52	Turner-01-21		#3 L679+			26190	Elisha Wm. Turner b1823 GA d 1874 Titus Co. TX	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
53	Turner-01-22		#3 L679+			9889	Henry Turner b c1757 VA/NC d aft 1820 TN m Jemima	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
54	Turner-01-23		#3 L679+			5795	John Wm Turner b1828 GA d 1866 TX	Scotland	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
55	Turner-01-24		#3 L679+			320673	James Edward Hudson b1857 Sussex, DE d 1934 MD	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
56	Turner-01-25		#3 L679+			154252	Mathias Turner b c1800 SC d c1872 AL m Nancy Billingsley	United Kingdom	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
57	Turner-01-26		#3 L679+			7096	Daniel Turner b1731 MD>Sampson b1755 MD d1800-1806 GA	Scotland	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
58	Turner-01-27		#3 L679+			7503	Elisha Turner b1697 MD m Mary Carrol>Zadock 1729 d1819 GA	Scotland	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
59	Turner-01-28		#3 L679+			86650	Stephen E. Turner b c1810 GA d1869 LA m M.A. Jowers	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
60	Turner-01-13		#3 L679+			8538	Elijah Turner b1772 NC d1859 Spart'burg Co. SC m Sarratt	Scotland	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
61	Turner-01-14		#3 L679+			5818	Thomas B. Turner b1780 MD d1850 GA m Unicy Collins	Scotland	R-M269	12	23	15	10	12-14	12	12	13	13	13	29
62	Turner-01-03		#3 L679+			127379	Mathias Turner b c1787 SC d c1858 GA m Tabitha (?Price)	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	12	13	13	29
63	Turner-01-01	L679+	#3 L679+			66027	Martin Lee Turner b1801 GA d 1869 TX m Harriet Haddox	Unknown Origin	R-L679	12	23	15	10	12-13	12	12	14	13	13	29
64	Turner-01-30		#3 L679+			12549	Samuel bc1812 SC dc1862TX m Emily Midkiff>Wm Cecil	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	14	13	13	29
65	Turner-01-31		#3 L679+			27888	Samuel Turner bc1812 SC dc1862TX m Emily Midkiff>Sam H.	Unknown Origin	R-M269	12	23	15	10	12-14	12	12	14	13	13	29
66	Turner-01-32		#3 L679+			9766	Wm Turner b1784 SC d1850-1860 SC m Elizabeth>Elias b1828	Unknown Origin	R-M269	12	23	15	10	12-15	12	12	13	13	13	29
67	Turner-01-33		#3 L679+			11036	Mathias Turner b 1773 NC d 1870 MO m Margaret Nesbitt	United Kingdom	R-M269	12	23	15	10	13-14	12	12	13	13	13	29
68	Turner-01-34		#3 L679+			263912	John Turner d 1813 SC>Mathias d1818 SC>Wm. B. d 1855 SC	Scotland	R-M269	12	23	15	11	12-14	12	12	13	13	13	29
69	Turner-01-36	S16264+, S21225+, L679+, A7314+, F110- {BY}	#3 L679+			20860	Elias Turner bef. 1755 MD>NC>KY d c 1825 IL	Unknown Origin	R-A7314	12	24	15	10	12-14	12	12	13	13	13	29

S16264 Haplotypes 04/02/2018

**	F	M	V	V	M	S	M	F	F	F	M	M	F	F	F	F	VF	M	S	S	V	S	S	S	V	V	M	M	V	M	M	S	V	V	F	V	M	F	M	F	S	S	S	M	S	S	S	VF	S		S
	13	14/15	16	17	18	19	20	21	22-25	26	27	28/29	30	31	32	33	34/35	36	37	38	39	40/41	42	43	44	45	46	47	48	49/50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
	17	**9-10**	**11**	**11**	**25**	**15**	**19**	**29**	**15-15-17-17**	**11**	**11**	**19-23**	**16**	**15**	**18**	**17**	**36-38**	**12**	**12**	**11**	**9**	**15-16**	**8**	**10**	**10**	**8**	**10**	**10**	**12**	**23-23**	**16**	**10**	**12**	**12**	**15**	**8**	**12**	**22**	**20**	**13**	**12**	**11**	**13**	**11**	**11**	**12**	**12**	**33**	**15**	**9**	**16**
Sort Sequence	DYS458	DYS459	DYS455	DYS454	DYS447	DYS437	DYS448	DYS449	DYS464	DYS460	Y-GATA-H4	YCAII	DYS456	DYS607	DYS576	DYS570	CDY	DYS442	DYS438	DYS531	DYS578	DYF395S1	DYS590	DYS537	DYS641	DYS472	DYF406S1	DYS511	DYS425	DYS413	DYS557	DYS594	DYS436	DYS490	DYS534	DYS450	DYS444	DYS481	DYS520	DYS446	DYS617	DYS568	DYS487	DYS572	DYS640	DYS492	DYS565	DYS710	DYS485	DYS632	DYS495
1																																																			
2	15	9-10	11	11	25	15	19	33	15-17-17-17	10	10	19-23	16	15	18	17	36-39	12	12	11	10	16-16	8	10	10	8	10	10	12	22-22	16	10	12	12	15	8	12	22	20	13	12	11	13	11	11	12	12				
3																																																			
4																																																			
5	17	9-10	11	11	25	15	19	29	14-15-15-15-16-17	11	11	19-23	16	15	16	17	34-37	12	12	11	9	15-16	8	10	10	8	10	10	12	22-23	16	10	12	12	14	8	13	22	20	13	12	11	13	11	11	12	12	38	15	9	16
6	17	9-10	11	11	25	15	19	29	14-15-15-15-16-17	11	12	19-23	16	15	16	17	34-37	12	12	11	9	15-16	8	10	10	8	10	10	12	22-23	16	10	12	12	14	8	13	22	20	13	12	11	13	11	11	12	12				
7																																																			
8	17	9-10	11	11	25	15	19	29	14-15-15-16-17-17																																										
9	17	9-10	11	11	25	15	19	30	14-15-15-16-17	11	11	19-23	16	15	16	17	33-35	12	12	11	9	15-16	8	10	10	8	10	10	0	22-23	16	10	12	12	14	8	13	22	20	13	12	11	13	11	11	12	12				
10	17	9-9	11	11	25	15	19	29	14-15-15-15-15-16-17	11	11	19-23	16	15	16	17	34-35	12	12	11	9	15-16	8	10	10	8	10	10	12	22-23	16	10	12	12	14	8	13	22	20	13	12	11	13	11	11	12	12	37	15	9	16
11																																																			
12	16	9-10	11	11	24	14	19	31	15-15-16-18	11	11	19-23	17	15	18	16	36-38	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	16	8	12	21	20	13	13	11	13	11	11	12	12	33	15	9	15
13																																																			
14	16	9-10	11	11	25	15	19	29	15-15-16-17	12	11	19-23	15	15	19	15	37-37	12	12	11	9	15-16	8	10	10	8	10	10	12	23-24	16	10	12	12	15	8	13	22	21	13	12	11	13	11	11	12	12				
15	16	9-10	11	11	25	15	19	29	15-15-16-17	12	11	19-23	15					12	12																		13			13												
16	16	9-10	11	11	25	15	19	29	15-15-16-17	11	11	19-23	15	15	19	15	37-37	12	12	11	9	15-16	8	10	10	8	10	10	12	23-24	16	10	12	12	15	8	13	22	21	13	12	11	13	11	11	12	12	35	15	9	16
17																																																			
18	17	9-10	10	11	25	15	19	30	15-15-15-17	12	11	19-23	15	15	17	16	35-39	11	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	15	8	14	22	21	13	12	11	13	10	11	12	12				
19	17	9-10	10	11	25	15	19	30	15-15-15-17	12	11	19-23	15	15	17	16	35-39	12	12																																	
20	17	9-10	10	11	25	15	19	30	15-15-15-17	12	11	19-23	15	15	17	16	36-38	12	12																																	
21	17	9-10	10	11	25	15	19	30	15-15-16-17																																										
22	17	9-10	10	11	25	15	19	30	15-15-16-17	11	11	19-23	15	15	17	16	35-39	12	12																																	
23	17	9-10	10	11	25	15	19	30	15-15-16-17																																										
24																																																			
25	16	9-10	10	11	25	15	19	29	15-15-15-17	11	11	19-23	15	15	18	17	36-38	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	16	8	14	22	21	13	12	11	13	11	11	12	12	35	15	9	16
26																																																			
27	16	9-10	10	11	25	15	19	29	14-15-15-17	10	11	19-23	15	15	18	17	36-37	12	12																																	
28																																																			
29	16	9-9	10	11	25	15	19	29	15-15-15-15	13	11	19-23	15	15	17	16	35-39	12	12	11	9	15-16	8	10	10	8	10	10	12	23-25	16	10	12	12	15	8	14	22	21	13	12	11	13	11	11	12	12				
30																																																			
31	16	9-10	10	11	25	15	19	29	14-15-15-15	12	11	19-23	16	14	18	16	36-36	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	15	8	14	22	21	14	12	11	13	11	11	12	12	34	15	9	16
32	16	9-10	10	11	25	15	19	29	14-15-15-15	11	11	19-23	16	15	18	16	36-36	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	15	8	14	22	21	14	12	11	13	11	11	12	12	34	15	9	16
33																																																			
34	16	9-10	10	11	25	15	19	28	14-15-15-15	11	11	19-23	16	15	18	16	33-36	12	12																																	
35	16	9-10	10	11	25	15	19	29	14-15-15-15	12	11	19-23	16	15	18	16	35-36	12	12																																	
36	16	9-10	10	11	25	15	19	29	14-15-15-15	12	11	19-23	16	15	18	16	34-36	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	15	8	14	22	21	14	12	11	13	11	11	12	12				
37	16	9-10	10	11	25	15	19	29	14-15-15-15	12	11	19-23	16	14	18	16	34-36	12	12																																	
38	16	9-10	10	11	25	15	19	29	14-15-15-15	12	11	19-23	16	15	17	16	33-36	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	14	8	15	22	21	14	12	11	13	11	11	12	12	34	15	9	16
39	16	9-10	10	11	25	15	19	29	14-15-15-15	12	11	19-23	16	15	18	16	34-36	12	12																																	
40	16	9-10	10	11	25	15	19	29	14-15-15-15	12	11	19-23	16	15	18	16	34-36	12	12																																	

S16264 Haplotypes 04/02/2018

**	F	M	V	V	M	S	M	F	F	F	M	M	F	F	F	F	VF	M	S	S	V	S	S	S	V	V	M	M	V	M	M	S	V	V	F	V	M	F	M	F	S	S	S	M	S	S	S	VF	S		S
	13	14/15	16	17	18	19	20	21	22-25	26	27	28/29	30	31	32	33	34/35	36	37	38	39	40/41	42	43	44	45	46	47	48	49/50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
	17	**9-10**	**11**	**11**	**25**	**15**	**19**	**29**	**15-15-17-17**	**11**	**11**	**19-23**	**16**	**15**	**18**	**17**	**36-38**	**12**	**12**	**11**	**9**	**15-16**	**8**	**10**	**10**	**8**	**10**	**10**	**12**	**23-23**	**16**	**10**	**12**	**12**	**15**	**8**	**12**	**22**	**20**	**13**	**12**	**11**	**13**	**11**	**11**	**12**	**12**	**33**	**15**	**9**	**16**
Sort Sequence	DYS458	DYS459	DYS455	DYS454	DYS447	DYS437	DYS448	DYS449	DYS464	DYS460	Y-GATA-H4	YCAII	DYS456	DYS607	DYS576	DYS570	CDY	DYS442	DYS438	DYS531	DYS578	DYF395S1	DYS590	DYS537	DYS641	DYS472	DYF406S1	DYS511	DYS425	DYS413	DYS557	DYS594	DYS436	DYS490	DYS534	DYS450	DYS444	DYS481	DYS520	DYS446	DYS617	DYS568	DYS487	DYS572	DYS640	DYS492	DYS565	DYS710	DYS485	DYS632	DYS495
41	16	9-10	10	11	25	15	19	29	14-15-15-15	12	11	19-23	16	15	18	16	34-36	12	12																																	
42	16	9-10	10	11	25	15	19	29	14-15-15-15	12	11	19-23	16	15	18	16	34-36	12	12																																	
43	16	9-10	10	11	25	15	19	29	14-15-15-15	12	11	19-23	16	15	18	16	34-36	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	15	8	14	22	21	14	12	11	13	11	11	12	12				
44	16	9-10	10	11	25	15	19	29	14-15-15-15	12	11	19-23	16	15	18	17	34-36	12	12																																	
45	16	9-10	10	11	25	15	19	29	14-15-15-15	12	11	19-23	16	15	18	17	34-37	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	15	8	14	22	21	14	12	11	13	11	11	12	12				
46	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	11	12																																	
47	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	11																																	
48	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12																																	
49	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12																																	
50	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12																																	
51	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12																																	
52	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12																																	
53	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12																																	
54	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	15	8	14	22	21	14	12	11	13	11	11	12	12	34	15	9	16
55	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	15	8	14	22	21	14	12	11	13	11	11	12	12				
56	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	15	8	14	22	21	14	12	11	13	11	11	12	12				
57	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	17	34-36	12	12																																	
58	16	9-10	10	11	25	15	19	30	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12																																	
59	16	9-10	10	11	26	15	19	29	15-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12																																	
60	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	14	18	16	34-36	12	12																																	
61	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	17	16	34-35	12	12																																	
62	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	14	18	16	34-36	12	12																																	
63	16	9-10	10	11	26	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	15	8	14	22	21	14	12	11	13	11	11	12	12				
64	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	15	10	12	12	15	8	14	22	21	14	12	11	13	11	11	12	12				
65	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-37	12	12																																	
66	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	35-36	12	12																																	
67	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	17	34-36	12	12																																	
68	16	9-10	10	11	25	15	19	29	14-15-15-15	13	11	19-23	16	15	18	16	34-36	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	15	8	14	22	21	14	12	11	13	11	11	12	12	34	15	9	16
69	16	9-10	10	11	25	15	19	30	14-15-15-15	13	11	19-23	16	15	19	16	34-36	12	12	11	9	15-16	8	10	10	8	10	10	12	23-23	16	10	12	12	15	8	14	22	21	14	12	11	13	11	11	12	12	34	15	9	16

S16264 Haplotypes 04/02/2018

**	S	F	S	F	F	S	F	S	S	S	F	S		S	S	S	S	M	M	M	S	S	VF		F	F	M	F	M	M	S		M	S	M	S	M		S	
	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
	12	**26**	**26**	**19**	**12**	**11**	**13**	**12**	**10**	**9**	**12**	**12**	**10**	**11**	**11**	**30**	**12**	**13**	**24**	**13**	**10**	**10**	**20**	**15**	**19**	**13**	**24**	**17**	**12**	**15**	**24**	**12**	**23**	**18**	**10**	**14**	**17**	**9**	**12**	**11**
Sort Sequence	DYS540	DYS714	DYS716	DYS717	DYS505	DYS556	DYS549	DYS589	DYS522	DYS494	DYS533	DYS636	DYS575	DYS638	DYS462	DYS452	DYS445	Y-GATA-A10	DYS463	DYS441	Y-GGAAT-1B07	DYS525	DYS712	DYS593	DYS650	DYS532	DYS715	DYS504	DYS513	DYS561	DYS552	DYS726	DYS635	DYS587	DYS643	DYS497	DYS510	DYS434	DYS461	DYS435
1																																								
2																																								
3																																								
4																																								
5	12	23	26	19	12	11	12	12	11	9	14	12	10	11	11	30	12	13	24	13	10	10	20	15	18	14	25	18	14	15	24	12	23	18	10	14	18	9	12	11
6																																								
7																																								
8																																								
9																																								
10	12	23	26	19	12	11	12	12	10	9	14	12	10	11	11	30	12	13	24	13	10	10	20	15	18	14	25	18	14	15	24	12	23	18	10	14	18	9	12	11
11																																								
12	12	23	26	19	12	11	13	12	11	9	12	12	10	11	11	30	13	13	24	13	10	10	21	15	19	13	24	17	13	14	24	13	23	18	10	14	16	9	12	11
13																																								
14																																								
15															11	30	12	12	21	13	10												23						12	
16	13	23	26	19	13	11	14	12	11	9	12	12	10	11	11	30	12	12	21	13	10	10	20	15	20	13	23	17	13	15	25	12	23	18	10	14	17	9	12	11
17																																								
18																																								
19																																								
20																																								
21																																								
22																																								
23																																								
24																																								
25	13	24	26	19	13	11	13	12	11	9	13	12	10	11	11	30	12	13	21	14	10	10	20	15	20	13	24	17	12	16	24	12	23	18	10	14	17	9	12	11
26																																								
27																																								
28																																								
29																																								
30																																								
31	13	25	26	19	13	11	13	12	11	9	12	12	10	11	11	30	12	12	21	13	10	10	21	15	20	13	24	18	12	16	24	12	23	18	10	14	17	9	12	11
32	13	25	26	19	13	11	13	12	11	9	12	12	10	11	11	30	12	12	21	13	10	10	20	15	20	13	24	18	12	16	24	12	23	18	10	14	17	9	12	11
33																																								
34																																								
35																																								
36																																								
37																																								
38	13	25	26	19	12	11	13	12	11	9	12	12	10	11	11	30	12	12	21	13	10	10	20	15	20	13	24	18	12	15	24	12	23	18	10	14	17	9	12	11
39																																								
40																																								

- matches P312 Modal
- signature off-modal for its group of STR haplotypes
- ancient signature off-modal shared by diverse groups
- off-modal specific to one or two individuals within the group
- possible branching off-modals within a group *
- back-mutation to P312 Modal
- additional related DYS464 markers

* Some apparent branching markers may be independent identical ('parallel') mutations within a family group.

S16264 Haplotypes 04/02/2018

**	S	F	S	F	F	S	F	S	S	S	F	S		S	S	S	S	M	M	M	S	S	VF		F	F	M	F	M	M	S		M	S	M	S	M		S	
	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
	12	**26**	**26**	**19**	**12**	**11**	**13**	**12**	**10**	**9**	**12**	**12**	**10**	**11**	**11**	**30**	**12**	**13**	**24**	**13**	**10**	**10**	**20**	**15**	**19**	**13**	**24**	**17**	**12**	**15**	**24**	**12**	**23**	**18**	**10**	**14**	**17**	**9**	**12**	**11**
Sort Sequence	DYS540	DYS714	DYS716	DYS717	DYS505	DYS556	DYS549	DYS589	DYS522	DYS494	DYS533	DYS636	DYS575	DYS638	DYS462	DYS452	DYS445	Y-GATA-A10	DYS463	DYS441	Y-GGAAT-1B07	DYS525	DYS712	DYS593	DYS650	DYS532	DYS715	DYS504	DYS513	DYS561	DYS552	DYS726	DYS635	DYS587	DYS643	DYS497	DYS510	DYS434	DYS461	DYS435
41																																								
42																																								
43																																								
44																																								
45																																								
46																																								
47																																								
48																																								
49																																								
50																																								
51																																								
52																																								
53																																								
54	13	25	26	19	13	11	13	12	11	9	12	12	10	11	11	30	12	12	21	13	10	10	20	15	20	13	23	18	12	16	24	12	23	18	10	14	17	9	12	11
55																																								
56																																								
57																																								
58																																								
59																																								
60																																								
61																																								
62																																								
63																																								
64																																								
65																																								
66																																								
67																																								
68	13	25	26	19	13	11	13	12	11	9	12	12	10	11	11	30	12	12	21	13	10	10	20	15	20	13	24	18	12	16	24	12	23	18	10	14	17	9	12	11
69	13	25	26	19	13	11	13	12	11	9	12	12	10	11	11	30	12	12	21	13	10	10	20	15	20	12	24	18	12	16	24	12	23	18	10	14	17	9	12	11