

Markers inconsistent with R1a1a1(xa-e) are colored Red

Marker	Inferred Haplogroup
M91+	A
P97+	A
M42+	BT
M94+	BT
M299+	BT
M288+	B1
M168+	CF
M294+	CF
P143+	C,F
M213+	F
M89+	F
P135+	F
P136+	F
P137+	F
P138+	F
P139+	F
P14+	F
P140+	F
P141+	F
P145+	F
P148+	F
P149+	F
P151+	F
P157+	F
P158+	F
P159+	F
P160+	F
P161+	F
P163+	F
P187+	F
U33+	G
L15+	IJK
L16+	IJK
M522+	IJK
M523+	IJK
S137+	IJK
S138+	IJK
P38+	I
P40+	I1
M9+	K
P128+	K
P131+	K
P132+	K
P117+	M3
M45+	P

P226+	P
P228+	P
P230+	P
P237+	P
P239+	P
P243+	P
P244+	P
P281+	P
P282+	P
P284+	P
P295+	P
Page83+	P
M207+	R
P224+	R
P232+	R
P245+	R
P280+	R
UTY2+	R
M173+	R1
M306+	R1
P225+	R1
P233+	R1
P234+	R1
P236+	R1
P238+	R1
P241+	R1
P286+	R1
S1+	R1
L62+	R1a
L63+	R1a
M511+	R1a
M513+	R1a
L120+	R1a1
L122+	R1a1
M448+	R1a1
M459+	R1a1
M516+	R1a1
SRY10831.2 (SRY10831b)+	R1a1
SRY1532.2 (SRY-1532)+	R1a1
M17+	R1a1a
M198+	R1a1a
M512+	R1a1a
M514+	R1a1a
M515+	R1a1a
M417+	R1a1a1
Page07+	R1a1a1
PS7+	R1a1a1
M193+	T
M31-	xA1a

M6-	xA2
M14-	xA2
M23-	xA2
M49-	xA2
M71-	xA2
M141-	xA2
M196-	xA2
M206-	xA2
M212-	xA2
M276-	xA2
M277-	xA2
MEH1-	xA2
P247-	xA2
P248-	xA2
P36.1-	xA2
P4-	xA2
M114-	xA2a
P28-	xA2b
P262-	xA2c
M32-	xA3
M28-	xA3a
M59-	xA3a
M144-	xA3b
M190-	xA3b
M220-	xA3b
P289-	xA3b
M51-	xA3b1
P100-	xA3b1
P71-	xA3b1a
M127-	xA3b2
M13-	xA3b2
M202-	xA3b2
M219-	xA3b2
M305-	xA3b2
M171-	xA3b2a
M118-	xA3b2b
M60-	xB
M181-	xB
P85-	xB
M146-	xB1a
M182-	xB2
M150-	xB2a
M218-	xB2a1
M109-	xB2a1a
M152-	xB2a1a
P50-	xB2a1a
M108.1 (M108a)-	xB2a2
M43-	xB2a2a
P111-	xB2a2a

50f2(P)-	xB2b
M112-	xB2b
P6-	xB2b1
M115-	xB2b2
M169-	xB2b2
M30-	xB2b3
M129-	xB2b3
M108.2 (M108b)-	xB2b3a
P70-	xB2b4a
M211-	xB2b4b
SRY1532.1 (SRY-1532)-	Reverts
SRY10831.1 (SRY10831a)-	Reverts
M145-	xDE
M203-	xDE
P165-	xDE
P167-	xDE
P205-	xDE
021355-	xD
IMS-JST021355-	xD
M174-	xD
M15-	xD1
N1-	xD1a
N2-	xD1a1
M55-	xD2
M179-	xD2
M64.1 (M64a)-	xD2
P190-	xD2
M116.1 (M116a)-	xD2a
M125-	xD2a1
IMS-JST022457-	xD2a1b
022457-	xD2a1b
P53.2 (P53b)-	xD2a1b1
M151-	xD2a2
P120-	xD2a3
P47-	xD3a
M96-	xE
P29-	xE
P150-	xE
P152-	xE
P154-	xE
P155-	xE
P156-	xE
P169-	xE
P170-	xE
P171-	xE
P172-	xE
P173-	xE
P175-	xE
M33-	xE1a

M44-	xE1a1
L133-	xE1a3
P177-	xE1b
P2-	xE1b1
P179-	xE1b1
P180-	xE1b1
P181-	xE1b1
PN2-	xE1b1
DYS271-	xE1b1a
M2-	xE1b1a
M180-	xE1b1a
P88-	xE1b1a
P182-	xE1b1a
P189-	xE1b1a
P211-	xE1b1a
SY81-	xE1b1a
M58-	xE1b1a1
M116.2 (M116b)-	xE1b1a2
M149-	xE1b1a3
M154-	xE1b1a4
M155-	xE1b1a5
M10-	xE1b1a6
M156-	xE1b1a6
M195-	xE1b1a6
M66-	xE1b1a6
M191-	xE1b1a7
P86-	xE1b1a7
P253-	xE1b1a7
U186-	xE1b1a7
U247-	xE1b1a7
P252-	xE1b1a7a
U174-	xE1b1a7a
P116-	xE1b1a7a3
U175-	xE1b1a8
P277-	xE1b1a8a
P278-	xE1b1a8a
U209-	xE1b1a8a
U290-	xE1b1a8a1
U181-	xE1b1a8a1a
P268-	xE1b1a9
M215-	xE1b1b
M35-	xE1b1b1
M243-	xE1b1b1
M78-	xE1b1b1a
V12-	xE1b1b1a1
M224-	xE1b1b1a1a
V32-	xE1b1b1a1b
V36-	xE1b1b1a2
V13-	xE1b1b1a2

V27-	xE1b1b1a2a
V22-	xE1b1b1a3
M148-	xE1b1b1a3a
V19-	xE1b1b1a3b
M81-	xE1b1b1b
M107-	xE1b1b1b1
M183-	xE1b1b1b2
M310-	xE1b1b1b2
M165-	xE1b1b1b2a
M123-	xE1b1b1c
M34-	xE1b1b1c1
M84-	xE1b1b1c1a
M290-	xE1b1b1c1b
V6-	xE1b1b1e
P72-	xE1b1b1f
M329-	xE1b1c
M75-	xE2
M54-	xE2b
M90-	xE2b
M98-	xE2b
M85-	xE2b1
M130-	xC
M216-	xC
P255-	xC
P260-	xC
P324-	xC
P325-	xC
RPS4Y711-	xC
M8-	xC1
M105-	xC1
M131-	xC1
M38-	xC2
M208-	xC2a
P54-	xC2a2
M217-	xC3
P44-	xC3
PK2-	xC3
M93-	xC3a
M48-	xC3c
M77-	xC3c
M86-	xC3c1
M407-	xC3d
P53.1 (P53a)-	xC3e
P62-	xC3f
M210-	xC4a
M356-	xC5
P92-	xC5a
P55-	xC6
L90-	xG2a3a1

S130-	xG2a3a1
S133-	xG2a3a1
U16-	xG2a3a1
L13-	xG2a3b1a1a
L78-	xG2a3b1a1a
S131-	xG2a3b1a1a
U13-	xG2a3b1a1a
L43-	xG2a3b1a2
S147-	xG2a3b1a2
L42-	xG2a3b1a2a
S146-	xG2a3b1a2a
M377-	xG2c
M283-	xG2c1
M69-	xH
M52-	xH1
M82-	xH1a
M197-	xH1a1
M36-	xH1a1
M97-	xH1a2
M39-	xH1a3
M138-	xH1a3
Apt-	xH2
M429-	xIJ
P123-	xIJ
P124-	xIJ
P125-	xIJ
P126-	xIJ
P127-	xIJ
P129-	xIJ
P130-	xIJ
M170-	xI
M258-	xI
U179-	xI
L121-	xI1
L124-	xI1
L125-	xI1
M253-	xI1
M307.2-	xI1
M450-	xI1
P203.2-	xI1
P30-	xI1
S62-	xI1
S64-	xI1
S65-	xI1
S107-	xI1
S108-	xI1
S109-	xI1
S110-	xI1
M21-	xI1a

M227-	xI1b
M72-	xI1b1
P259-	xI1c
L22-	xI1d
S142-	xI1d
P109-	xI1d1
L68-	xI2
M438-	xI2
P215-	xI2
S31-	xI2
M26-	xI2a1
M161-	xI2a1a
M161-	xI2a1a
M423-	xI2a2
M436-	xI2b
P214-	xI2b
P216-	xI2b
P217-	xI2b
S23-	xI2b
S30-	xI2b
S33-	xI2b
M223-	xI2b1
P219-	xI2b1
P220-	xI2b1
P221-	xI2b1
P222-	xI2b1
P223-	xI2b1
S117-	xI2b1
S118-	xI2b1
S119-	xI2b1
S24-	xI2b1
S120-	xI2b1
U250-	xI2b1
L126-	xI2b1a1
L137-	xI2b1a1
S165-	xI2b1a1
S166-	xI2b1a1
P95-	xI2b1d
L38-	xI2b2
L39-	xI2b2
L40-	xI2b2
L65.1-	xI2b2
S154-	xI2b2
S155-	xI2b2
S156-	xI2b2
S159.1-	xI2b2
M304-	xJ
M267-	xJ1
M62-	xJ1a

M390-	xJ1c
L65.2-	xJ1c3d1a
S159.2-	xJ1c3d1a
P56-	xJ1d
M369-	xJ1e2
M172-	xJ2
M410-	xJ2a
M340-	xJ2a2
P279-	xJ2a3
L26-	xJ2a4
L27-	xJ2a4
S57-	xJ2a4
M322-	xJ2a4a
M47-	xJ2a4a
M67-	xJ2a4b
S51-	xJ2a4b
M260-	xJ2a4b1
M92-	xJ2a4b1
M327-	xJ2a4b1a
M163-	xJ2a4b2
M166-	xJ2a4b2
M68-	xJ2a4c
M319-	xJ2a4d
M339-	xJ2a4e
M419-	xJ2a4f
L24-	xJ2a4h
L25-	xJ2a4h1
M137-	xJ2a4h1a1a
M289-	xJ2a4h1a1b
M318-	xJ2a4h1a1c
M158-	xJ2a4h2
M12-	xJ2b
M102-	xJ2b
M221-	xJ2b
M314-	xJ2b
M205-	xJ2b1
M241-	xJ2b2
M280-	xJ2b2b
M321-	xJ2b2c
L88.2-	xJ5a4i
M147-	xK1
P60-	xK2
P261-	xK4
P263-	xK4
M11-	xL
M185-	xL
M20-	xL
M22-	xL
M295-	xL

M61-	xL
M27-	xL1
M76-	xL1
M317-	xL2
M349-	xL2a
M274-	xL2b
M357-	xL3
PK3-	xL3a
P256-	xM
M4-	xM1
M5-	xM1
M106-	xM1
M186-	xM1
M189-	xM1
M296-	xM1
P73-	xM1
P51-	xM1a1
P94-	xM1a2
P87-	xM1b
M16-	xM1b1a
M83-	xM1b1b
M353-	xM2
M387-	xM2
M177-	xM2a
SRY9138 (SRY-9138)-	xM2a
P118-	xM3
M214-	xNO
P188-	xNO
P192-	xNO
P193-	xNO
P195-	xNO
M231-	xN
M46-	xN1c
P105-	xN1c
Tat-	xN1c
M178-	xN1c1
M175-	xO
P186-	xO
P191-	xO
P196-	xO
M119-	xO1a
M307.1-	xO1a1
P203.1-	xO1a1
M101-	xO1a1a
M50-	xO1a2
M103-	xO1a2
M110-	xO1a2
P31-	xO2
M95-	xO2a

M88-	xO2a1
M111-	xO2a1
PK4-	xO2a1a
M297-	xO2a2
022454-	xO2b
IMS-JST022454-	xO2b
M176-	xO2b
P49-	xO2b
SRY465 (SRY+465)-	xO2b
47z-	xO2b1
M122-	xO3
P198-	xO3
M324-	xO3a
P199-	xO3a
P200-	xO3a
021354-	xO3a3
IMS-JST021354-	xO3a3
P201-	xO3a3
M159-	xO3a3a
M7-	xO3a3b
M113-	xO3a3b1
M188-	xO3a3b1
M209-	xO3a3b1
N4-	xO3a3b1a
N5-	xO3a3b1b
P164-	xO3a3b2
M134-	xO3a3c
M117-	xO3a3c1
M133-	xO3a3c1
002611-	xO3a4
IMS-JST002611-	xO3a4
M300-	xO3a5
M242-	xQ
P36.2-	xQ1
MEH2-	xQ1a
N14-	xQ1a1
M120-	xQ1a1
M265-	xQ1a1
M143-	xQ1a2
M25-	xQ1a2
L56-	xQ1a3
L57-	xQ1a3
M323-	xQ1a3
M346-	xQ1a3
L53-	xQ1a3a
L54-	xQ1a3a
L55-	xQ1a3a
L213-	xQ1a3a
M3-	xQ1a3a1

M19-	xQ1a3a1a
M194-	xQ1a3a1b
M199-	xQ1a3a1c
L214-	xQ1b
L215-	xQ1b
M378-	xQ1b
P227-	xR
M56-	xR1a1a1a
M157-	xR1a1a1b
M64.2 (M64b)-	xR1a1a1c
M87-	xR1a1a1c
PK5-	xR1a1a1e
L278-	xR1b1
M415-	xR1b1
M18-	xR1b1a
P297-	xR1b1b
M73-	xR1b1b1
M269-	xR1b1b2
S3-	xR1b1b2
S10-	xR1b1b2
L49-	xR1b1b2a
L51-	xR1b1b2a1
M412-	xR1b1b2a1
S167-	xR1b1b2a1
L11-	xR1b1b2a1a
P310-	xR1b1b2a1a
P311-	xR1b1b2a1a
S127-	xR1b1b2a1a
S128-	xR1b1b2a1a
S129-	xR1b1b2a1a
M405-	xR1b1b2a1a1
S21-	xR1b1b2a1a1
U106-	xR1b1b2a1a1
M467-	xR1b1b2a1a1a
S29-	xR1b1b2a1a1a
U198-	xR1b1b2a1a1a
L48-	xR1b1b2a1a1d
S162-	xR1b1b2a1a1d
L47-	xR1b1b2a1a1d1
L44-	xR1b1b2a1a1d1a
L164-	xR1b1b2a1a1d1a1
L45-	xR1b1b2a1a1d1a1
L46-	xR1b1b2a1a1d1a1
M65-	xR1b1b2a1a2a
M153-	xR1b1b2a1a2b
M167-	xR1b1b2a1a2c
SRY2627 (SRY-2627)-	xR1b1b2a1a2c
S28-	xR1b1b2a1a2d
U152-	xR1b1b2a1a2d

M126-	xR1b1b2a1a2d1
M160-	xR1b1b2a1a2d2
L2-	xR1b1b2a1a2d3
S139-	xR1b1b2a1a2d3
L20-	xR1b1b2a1a2d3a
S144-	xR1b1b2a1a2d3a
S145-	xR1b1b2a1a2f
M37-	xR1b1b2a1a2f1
M222-	xR1b1b2a1a2f2
USP9Y+3636-	xR1b1b2a1a2f2
L144-	xR1b1b2a1a2f6
S175-	xR1b1b2a1a2f6
M335-	xR1b1c
M124-	xR2a
P249-	xR2a
P267-	xR2a
P202-	xS
P204-	xS
M254-	xS1
P57-	xS1a
P61-	xS1b
M226-	xS1d
M70-	xT
M184-	xT
M272-	xT
USP9Y+3178-	xT
M320-	xT1
L162-	xT2
L208-	xT2a
L131-	xT3

#### Private SNPs and unknowns

M63-	xA (Removed)
PK1-	xA (Removed)
P89.1-	xQ (Private SNPs)
P48-	xQ1a4 (Removed)
L50-	xR (Private SNPs)
M228.2-	xR (Private SNPs)
P89.2-	xR (Private SNPs)
S136-	xR (Private SNPs)

#### Incorrect Assignments in ISOGG site?

M135+	A2	Ancestor incorrect?
L222	T	del/ins
M379	G	ins/del
M478	G	T/C
P292	T	del/ins

S66	T	A/G
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Unknown ancestral state

M520	T
S111	G
U17	C

No data read

L145	no_read
L69.1(=G)	no_read
L69.2(=T)	no_read
L70	no_read
M192	no_read
M236	no_read
M365	deleted
M367	no_read
M368	no_read
M41	no_read
M449	no_read
P103	no_read
P106	no_read
P107	no_read
P121	no_read
P122	no_read
P210	no_read
P269	no_read
P293	no_read
P294	no_read
P37.1 (P37a)	no_read
P37.2 (P37b)	no_read
P39	no_read
P59	no_read
P69	no_read
P90	no_read
P91	no_read
P93	no_read
P98	no_read
P99	no_read
S163.1(=G)	no_read
S163.2(=T)	no_read
U1	no_read
U23	no_read