Supplementary Table 1: Indonesian Population Samples in the Present Study.

Island	Population	Sample Size	Total
Sumatra	Sumatra	42	42
Nias	Gomo	46	
	Hilitobara	13	59
Mentawai	Mentawai	128	128
Java	Dieng	35	
	Java	16	51
Bali	Abian Kebon	37	
	Bena	18	
	Calo	23	
	Gadon	20	
	Kebon	20	
	Kedisan Kaja	20	
	Kedisan Kelod	20	
	North Batur	19	
	Pujung Kaja	20	
	Sebatu	38	
	South Batur	25	
	Subak Bayad	20	
	Subak Bonjaka	21	
	Subak Jasan	23	
	Subak Jati	20	
	Subak Pakudui	19	
	Subak Tegal Suci	23	
	Sungi	20	
	Timbul	18	
	Tungkub	18	
	Yeh Tampuagan	45	487
Sulawesi	Bugis	50	
	Kajang	46	
	Mandar	54	
	Toraja	50	200
Sumba	Anakalang	47	
	Bilur Pangadu	54	
	Bukambero	50	
	Kodi	42	
	Lamboya	49	
	Loli	34	
	Mahu	45	
	Mamboro	52	

	Mbatakapidu	41	
	Praibakul	57	
	Rindi	28	
	Waimangura	50	
	Wanokaka	52	
	Wunga	33	634
Flores	Bama	49	
	Bena	46	
	Bere	11	
	Boawae	26	
	Cibol	55	
	Rampasasa	106	
	Seso	66	
	Wogo	36	
	Woloara	29	
	Wolotopa	45	469
Lembata	Kadakewa	47	
	Waipukang	45	92
Pantar	Pantar	29	29
Timor	Besikama	42	
	Fatuketi	35	
	Kakaniuk	49	
	Kamanasa	67	
	Kateri	50	
	Kletek	69	
	Laran	50	
	Raimanawe	50	
	Tialai	24	
	Umaklaran	41	
	Umanen Lawalu	49	526
Alor	Alor	23	23
Total sample size			2740

Supplementary Table 2: Mitochondrial DNA Haplogroup Assays.

Haplogroup	Assay	Mutation position	Base change	Restriction enzyme
B4a	RFLP	5,465	T→C	*Hph*I
B4a	TaqMan	5,465	T→C	
B4b	RFLP	4,820	G→A	*Mnl*I
B4c	Taqman	15,346	G→A	
B5a	RFLP	15,235	A→G	*Bst*YI
B5b	RFLP	15,223	C→T	*Bgl*II
B5b1	RFLP	8,784	A→G	*Ban*II
D	TaqMan	4,883	C→T	
D5	RFLP	10,397	A→G	*Bsr*I
E	TaqMan	7,598	G→A	
F	RFLP	10,310	G→A	*Bsp*MI, *Bfu*A1
F1	TaqMan	10,609	T→C	
F1a1'4	RFLP	9,548	G→A	*Bsp*1286I
F1ac	RFLP	9,053	G→A	*Hha*I
F3	TaqMan	5,978	A→G	
M	TaqMan	10,400	C→T	
M	RFLP	10,400	C→T	*Alu*I
M7	TaqMan	9,824	T→C	
M7b	RFLP	5,351	A→G	*Bsp*MI
M7b	RFLP	5,460	G→A	*Hph*I
M7c3	RFLP	15,236	A→G	*Ple*I
N	TaqMan	9,540	C→T	
P	RFLP	15,607	A→G	*Alu*I
Q	RFLP	5,843		*Bfa*I
Q1/Q2	RFLP	5,460	G→A	*Hph*I
R	RFLP	12,705		*Mbo*II
R9	TaqMan	3,970	C→T	
Y2	RFLP	6,941	T→C	

Abbreviations: RFLP, Restriction Fragment Length Polymorphism.

Supplementary Table 3: Mitochondrial DNA Haplogroup Frequencies (Percentages) in Indonesia.

Lineage	Western Indonesia					Eastern Indonesia							Total	
	SMT	NIA	MTW	JAV	BLI	SUM	FLO	LEM	TIM	ALR	PTR	SLW	Western Indonesia	Eastern Indonesia
	n=40	*n=62*	*n=126*	*n=49*	*n=457*	*n=639*	*n=453*	*n=92*	*n=528*	*n=23*	*n=27*	*n=188*	*n=734*	*n=1950*
B*		1.6			0.4	0.3	0.2						0.4	0.1
B4a	10.0	4.8			2.4	5.8	4.9	13.0	9.6	13.0		8.0	2.4	7.2
B4a1a1a					0.4	0.6			7.4	4.3			0.3	2.3
B4b1						5.6	2.9	3.3	3.6	4.3		4.3		4.1
B4c1b3	7.5	11.3		4.1	11.8	4.0	0.3		0.9		14.8	10.6	9.0	2.8
B4c2				2.0	7.4	0.2	1.2		0.6				4.8	0.5
B5a				8.2	18.4	3.1	4.0	1.1	0.8				12.0	2.2
B5b		9.6	23.8		3.7	5.6	2.6	1.1	1.5	4.3		1.1	7.2	3.1
D						2.0	3.8		0.8			0.5		1.8
D4									0.4					0.1
D5	2.5	1.6	0.8	2.0		1.4	1.8	1.1	0.2			1.6	0.5	1.1
D5b1c						4.2	1.5	3.3	2.6					2.6
E				2.0	1.5	1.4	1.8		3.0			2.7	1.1	2.0
E1a1a					2.4	3.0	2.4	8.7	5.5	8.7	3.7	18.1	1.5	5.3
E1b			3.2	2.0	0.7	4.7	1.1	1.1	6.4	4.3	3.7	6.9	1.1	4.3
E2				4.1	1.1	3.3	3.1		0.4			5.9	1.0	2.5
F1a				4.1	1.8	3.8	0.2		0.8			0.5	1.4	1.6
F1a1	2.5	1.6		4.1	1.8	1.3	2.4	2.2				0.5	1.6	1.1
F1a3					2.6	5.5	5.3	2.2	2.8			2.1	1.6	4.1
F1a4					1.5	4.7	3.8	14.1	19.3	13.0		2.7	1.0	8.7
F1ac	5.0			2.0	0.2		2.0					1.1	0.5	0.6
F3				14.3		0.6			0.8				1.0	0.4
M*	42.5	6.5	0.8	24.5	10.7	8.3	14.7	2.2	3.2	8.7	14.8	6.9	11.3	8.1
M7					1.1				0.2				0.7	0.1

M7b						1.4	0.7							0.6
M7b1				6.1	1.5		0.4	1.1					1.4	0.1
M7b3						5.2	1.6					2.1		2.3
M7c3		1.6			1.5		0.2	2.2	1.9				1.1	0.7
M7c3c	5.0	11.3	25.4	4.1	3.3	11.0	4.6	8.7	5.9	4.3	7.4	7.4	7.9	7.5
M9							0.2							0.0
M13b1							0.2	1.1						0.1
M17a		4.8	12.7		5.5	0.8	0.9			4.3	3.7	2.7	6.0	0.8
M73					3.9	1.7	4.4				7.4	8.0	2.5	2.5
M47						0.3								0.1
N*						0.8	6.6	2.2	0.8		3.7			2.2
N21					2.0								1.2	
N22					0.7								0.4	
N9a					1.1		0.2		1.7			0.5	0.7	0.6
P					0.2	1.4	5.7	13.0	0.9	4.3	3.7	0.5	0.1	2.8
Q									0.9					0.2
Q1						2.8	6.0	7.6	14.0	21.7	33.3	1.6		7.3
Q2								3.3						0.2
Q3					0.7								0.4	
R*	2.5		3.2	12.2	0.2	1.6	3.3	1.1	0.4	4.3	3.7	1.1	1.6	1.7
R9	2.5		4.8				2.2					1.6	1.0	0.7
R9b1						0.2		1.1						0.1
R9c1						2.5	0.4		2.1					1.5
R21			0.8										0.1	
R22		1.6	3.2	4.1	4.6	0.6	1.8	4.3					3.8	0.8
R23					1.5	0.2							1.0	0.1
Y2	20.0	43.5	21.4		3.3		0.4	1.1	0.8			1.1	10.5	0.5

* Mitochondrial DNA paragroups: Individuals could not be assigned to any derived haplogroup.

Abbreviations: SMT, Sumatra; NIA, Nias; MTW, Mentawai; JAV, Java; BLI, Bali; SUM, Sumba; FLO, Flores; LEM, Lembata; TIM, Timor; ALR, Alor; PTR, Pantar; SLW, Sulawesi.

Supplementary Table 4: Mitochondrial DNA Haplogroup Frequencies (Percentages) in Regional Populations.

Lineage	NW China Yao, et al. 2002	NE China Yao, et al. 2002	SW China Yao, et al. 2002	SE China Yao, et al. 2002	THAI Allard *et al.* 2004	VIET Li et al. 2007	Aboriginal Malay Hill et al. 2006	TAB Trejaut et al, 2005	PHIL Tabbada et al, 2010	PNG Friedlaender et al. 2007	Melanesia Friedlaender et al. 2007	Micronesia Friedlaender et al. 2007	Western Indonesia Present study	Eastern Indonesia Present Study
	n=47	*n=51*	*n=43*	*n=30*	*n=52*	*n=41*	*n=260*	*n=640*	*n=423*	*n=231*	*n=1366*	*n=47*	*n=734*	*n=1950*
B*			2.3	3.3		4.2	1.2						0.4	0.1
B4a		5.9	7.0	6.7	9.6	4.2	0.8	8.7	11.8				2.4	7.2
B4a1a1a									0.5	19.0	43.9	68.1	0.3	2.3
B4b1	2.1	2.0		10.0				6.0	7.6		0.3	8.5		4.1
B4c1b3								4.9	5.0				9.0	2.8
B4c2													4.8	0.5
B5a	4.3	2.0	4.7		3.8	4.2	0.8	5.9	0.7				12.0	2.2
B5b	2.1	2.0	2.3				5.8		7.8				7.2	3.1
D				3.3	1.9	6.3								1.8
D4	2.1	13.7	7.0											0.1
D5	2.1	3.9	2.3	3.3				4.8					0.5	1.1
D5b1c														2.6
E								2.3					1.1	2.0
E1a1a								6.9	11.1	0.4	0.5		1.5	5.3
E1b									1.4	0.4	5.4		1.1	4.3
E2								2.8	3.3	0.4	0.1		1.0	2.5
F1a	4.3	2.0	11.6	6.7		18.8		2.2					1.4	1.6
F1a1							10.8	3.9	0.2				1.6	1.1
F1a3					7.7				3.1				1.6	4.1
F1a4					1.9				4.3				1.0	8.7
F1ac													0.5	0.6
F3									1.9				1.0	0.4
M*	2.1	2.0	2.3	23.3	11.5	4.2	1.9						11.3	8.1

M7												23.4	0.7	0.1
M7b			2.3		3.8	8.3			0.2					0.6
M7b1	2.1	2.0	14.0		5.8	8.3		0.7	1.2				1.4	0.1
M7b3								8.2	3.3					2.3
M7c3	2.1	5.9		3.3									1.1	0.7
M7c3c							3.1	7.9	11.3				7.9	7.5
M9	4.3	2.0												0.0
M13b1					5.8		25.8		0.7					0.1
M17a													6.0	0.8
M73									0.47				2.5	2.5
M47														0.1
N*														2.2
N21							9.2						1.2	
N22					1.9		1.5		0.2				0.4	
N9a		2.0	7.0	6.7			6.5	1.2					0.7	0.6
P										42.9	3.8		0.1	2.8
Q														0.2
Q1										29.9	8.5			7.3
Q2										4.8	4.7			0.2
Q3										0.9	0.2		0.4	
R*		2.0				2.1							1.6	1.7
R9													1.0	0.7
R9b1						6.3	9.2							0.1
R9c1								2.9	5.0					1.5
R21							20.8						0.1	
R22													3.8	0.8
R23													1.0	0.1
Y2								1.4	4.7				10.5	0.5

* Mitochondrial DNA paragroups: Individuals could not be assigned to any derived haplogroup.

Abbreviations: NW China, Northwest China; NE China, Northeast China; SW China, Southwest China; SE China, Southeast China; THAI, Thailand; VIET, Vietnam; TAB, Aboriginal Taiwan; PNG, Papua New Guinea.
Note: Only lineages shared with Indonesian populations are shown.

Supplementary Table 5: Standardized Genetic Distances in Indonesia (G'_{ST}).

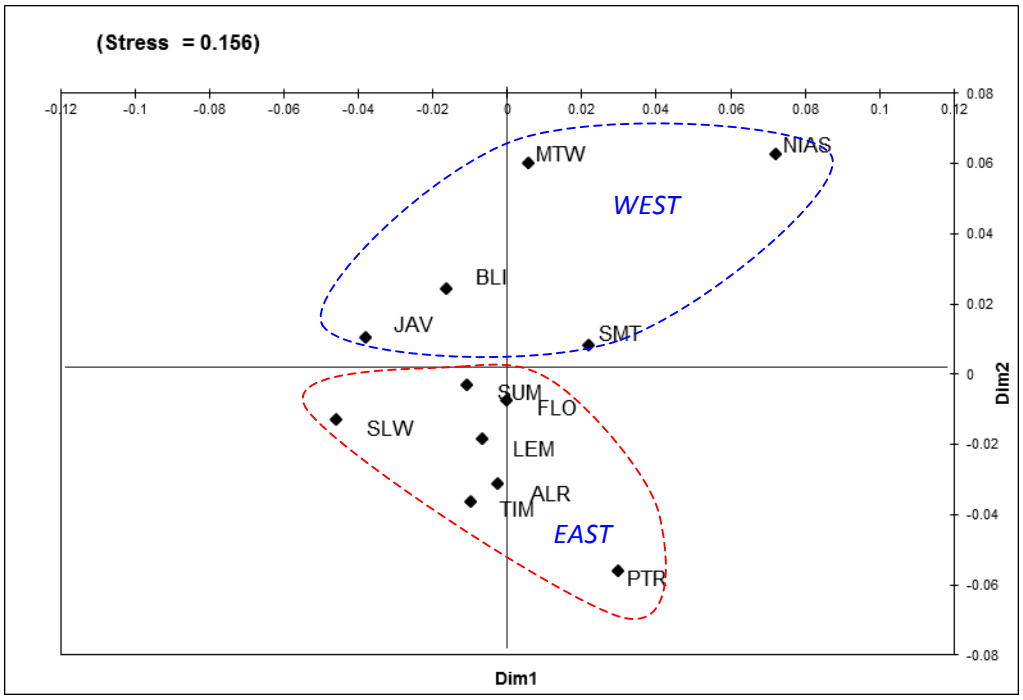
	Number of subpopulations (minimum of 2)	G'_{ST}			
		mtDNA HVS1	mtDNA SNP	Y-STR	Y-SNP
All Indonesian populations	70	0.862	0.571	0.972	0.791
Islands					
Nias	2	0.299	0.208	0.000	0.000
Java	2	0.230	0.091	0.659	0.000
Bali	21	0.814	0.406	0.919	0.283
Sulawesi	4	0.533	0.234	1.000	0.087
Sumba	14	0.648	0.319	0.894	0.559
Flores	10	0.756	0.334	0.834	0.769
Lembata	2	0.374	0.031	0.717	0.093
Timor	11	0.661	0.412	0.827	0.136
Eastern Indonesia	43	0.773	0.447	0.958	0.635
Western Indonesia	27	0.815	0.526	0.948	0.587

Supplementary Table 6: Tentative Estimates of the Time to the Most Recent Common Ancestor (TMRCA) of Selected Mitochondrial DNA Haplogroups Inferred from the ρ Statistic within Indonesia, the Philippines and Taiwan.

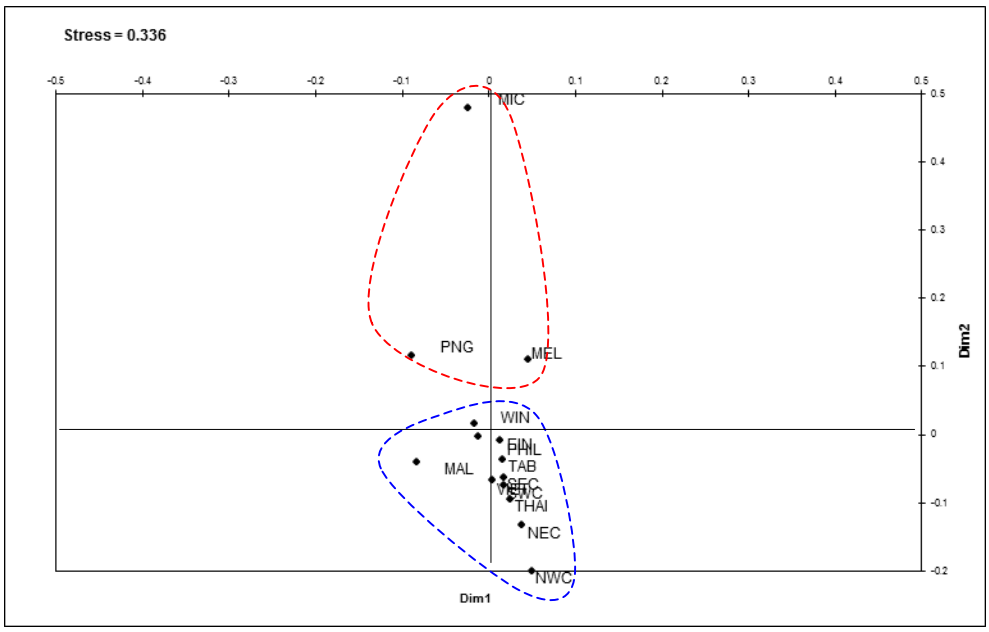
Haplogroup	Age in Indonesia (years BP ± SD)	ρ ± SD	Age in Philippines (years BP ± SD)	ρ ± SD	Age in Taiwan (years BP ± SD)	ρ ± SD
E1a1a	9,600 ± 3,250	0.500 ± 0.17	15,600 ± 9,350	0.816 ± 0.49	8,100 ± 3,700	0.420 ± 0.19
M7b3	8,350 ± 5,550	0.437 ± 0.29	5,800 ± 5,000	0.301 ± 0.26	10,800 ± 5,400	0.564 ± 0.28
M7c3c	9,100 ± 3,550	0.475 ± 0.19	4,050 ± 1,600	0.210 ± 0.08	5,700 ± 2,900	0.297 ± 0.15
Y2	4,300 ± 2,050	0.226 ± 0.11	800 ± 400	0.0420 ± 0.021		
F1a4	5,200 ± 1,850	0.272 ± 0.096	1,250 ± 700	0.0660 ± 0.036		
B4a1a1a (Polynesian Motif)	12,500 ± 3,850	0.652 ± 0.20				
B4a	33,200 ± 12,650	1.73 ± 0.66				
B4b	18,200 ± 10,950	0.949 ± 0.57				
B4c1b3	13,000 ± 3,350	0.674 ± 0.18				
B5a	14,650 ± 5,500	0.764 ± 0.29				
B5b	13,000 ± 4,750	0.678 ± 0.25				
B5b1	9,600 ± 4,650	0.500 ± 0.24				
D	25,400 ± 7,600	1.33 ± 0.40				
D5	16,200 ± 5,600	0.846 ± 0.29				
E	36,200 ± 15,300	1.89 ± 0.80				
P	54,000 ± 15,950	2.82 ± 0.83				
P1c	28,000 ± 11,600	1.46 ± 0.60				
Q	38,200 ± 9,400	1.99 ± 0.49				

Dates are rounded to the nearest 50 years before present.
Abbreviations: BP, before present; SD, standard deviation.

Supplementary Figure 1: Multidimensional Scaling (MDS) Plot of Indonesian Populations based on HVS I Sequences.



Supplementary Figure 2: Multidimensional Scaling (MDS) Plot of Indonesian and Close Geographic Neighbors based on Mitochondrial DNA Haplogroup Frequencies.



Supplementary Figure 3: Multidimensional Scaling (MDS) Plot of Western and Eastern Indonesian Groups and Neighboring Populations based on Mitochondrial DNA Haplogroup Frequencies.