

**Table S1. Ancestry Informative Markers (ascertained genomic SNPs).**

<b>Locus Type</b>	<b>Genome Coordinate*</b>	<b>SNP ID</b>	<b>SNP</b>	<b>Strand</b>	<b>F<sub>ST</sub><sup>†</sup></b>	
Autosomal	chr2:4,502,845	rs629066	R	-	0.68	
	chr3:154,285,372	rs11928167	K	+	0.81	
	chr4:113,220,802	rs6533603	Y	+	0.78	
	chr4:164,211,883	rs3967761	Y	+	0.92	
	chr5:4,313,649	rs261135	S	+	0.51	
	chr5:170,202,984	rs7722456	Y	+	0.88	
	chr6:138,132,445	rs9494868	K	+	0.80	
	chr7:76,950,035	rs6950870	Y	+	0.78	
	chr7:153,254,246	none	R	+	0.68	
	chr8:128,713,173	rs12547643	R	+	0.86	
	chr10:94,893,473	rs6583859	R	+	0.95	
	chr10:119,376,627	rs181649	R	+	0.61	
	chr11:20,282,368	rs871401	R	-	0.75	
	chr12:47,786,575	rs11183932	W	+	0.69	
	chr13:65,900,693	rs965281	Y	+	0.61	
	chr14:82,739,350	rs709905	Y	+	0.84	
	chr20:57,384,175	rs6070620	Y	+	0.83	
	chr22:41,684,426	rs1984584	R	+	0.75	
						<i>n=18</i>
	X Chromosomal	chrX:3,449,529	rs11152505	R	+	0.81
chrX:6,479,011		rs5989592	Y	-	0.68	
chrX:22,653,967		rs4469657	R	+	0.73	
chrX:30,532,864		rs4829186	R	+	0.74	
chrX:35,420,094		rs4829366	M	+	0.85	
chrX:56,369,721		rs6521411	M	+	0.75	
chrX:114,893,103		rs5987967	R	+	0.80	
chrX:119,933,338		rs5909765	M	+	0.70	
chrX:121,263,473		rs5957894	R	+	0.73	
chrX:121,312,591		rs6607932	Y	+	0.73	
chrX:136,150,573		rs6633864	Y	+	0.68	
chrX:137,272,692		rs656586	R	-	0.53	
chrX:141,164,571		rs5954515	Y	+	0.50	
chrX:141,395,747		rs2869523	Y	+	0.68	
chrX:142,769,077		rs6637065	Y	+	0.81	
chrX:147,438,557		rs6641214	Y	+	0.80	
chrX:150,942,360		rs12390709	K	+	0.68	
chrX:152,174,732		rs1034376	Y	+	0.73	
chrX:153,381,023		rs3850327	R	+	0.79	
						<i>n=19</i>

\* Genome coordinate for UCSC Human Genome Build hg19 (February 2009)

<sup>†</sup> F<sub>ST</sub> between Southern Han Chinese and Papua New Guinea Highlanders

**Table S2. Mean and range of population sample sizes per SNP.**

Region	Location	Population	Sample Size		
			Mean	Range	
Parentals	China	Southern Han	29	8	50
	Melanesia	PNG Highlanders	40	14	60
Mainland Asia	China	Miao	22	15	30
	China	She	24	16	30
	China	Tujia	28	12	40
	China	Yao	37	24	50
	China	Yi	22	14	30
	Vietnam	Vietnamese	15	9	20
ISEA	Taiwan	Hakka	21	14	28
	Taiwan	Aborigine	21	13	28
	Malaysia	Malaysians	10	6	14
	Philippines	Aeta	11	8	14
	Philippines	Filipino	12	7	16
Indonesia	Sumatra	Toba	42	9	58
	Nias	Gomo	32	5	44
	Nias	Hilitobara	11	3	16
	Mentawai	Mentawai	41	0	60
	Java	Dieng	50	28	68
	Java	Javanese	26	17	36
	Borneo	Long Gi-Berau	17	3	24
	Borneo	Long Soluy-Berau	10	1	16
	Borneo	Pampang-Samarinda	8	0	12
	Bali	Apit Yeh	9	0	14
	Bali	Bena	26	0	40
	Bali	Jaka	12	0	18
	Bali	Pulau Akitan	13	0	20
	Bali	Sungi1	24	0	38
	Bali	Tungkub1	21	0	38
	Bali	Uma Poh	18	0	26
	Sulawesi	Bugis	29	0	60
	Sulawesi	Kajang	33	1	48
	Sulawesi	Toraja	40	0	58
	Flores	Bama	36	1	52
	Flores	Bena	63	0	78
	Flores	Bere Manggarai	15	0	22
	Flores	Boawae	35	0	52
	Flores	Cibol	51	3	76
	Flores	Rampasasa	57	1	78
	Flores	Seso Borowa	66	0	80
	Flores/Lembata	Timur Hadakewa	15	0	22
	Flores	Wogo	50	31	70
	Flores	Woloara	41	0	58
	Sumba	Anakalang	75	49	102
	Sumba	Bilur Pangadu	58	38	80
	Sumba	Kodi	62	37	86

	Sumba	Lamboya	65	32	96
	Sumba	Loli	56	31	76
	Sumba	Mahu	55	9	80
	Sumba	Mamboro	63	40	86
	Sumba	Mbukambero	54	19	84
	Sumba	Praibakul	50	21	78
	Sumba	Rindi	15	9	20
	Sumba	Waimangura	58	39	80
	Sumba	Wanokaka	56	38	78
	Sumba	Wunga	42	28	58
	Alor	Alor	24	0	46
Melanesia	Papua New Guinea	Coastal	13	2	20
	Bismarck Archipelago	New Britain	35	8	50
	Bougainville	Nasioi	14	5	20
	Vanuatu	Maewo	27	0	44
Mean and Range			33	0	102

**Table S3. Asian admixture rates inferred from all SNPs.**

<b>Region</b>	<b>Location</b>	<b>Population</b>	<b>Asian Admixture</b>	<b>95% Confidence Interval</b>		
Mainland Asia	China	Miao	1.00	1.00	-	1.00
	China	She	1.00	1.00	-	1.00
	China	Tujia	1.00	1.00	-	1.00
	China	Yao	1.00	1.00	-	1.00
	China	Yi	1.00	1.00	-	1.00
	Vietnam	Vietnamese	1.00	0.97	-	1.00
ISEA	Taiwan	Hakka	1.00	1.00	-	1.00
	Taiwan	Aborigine	1.00	1.00	-	1.00
	Malaysia	Malaysians	1.00	0.88	-	1.00
	Philippines	Aeta	1.00	0.80	-	1.00
	Philippines	Filipino	1.00	0.96	-	1.00
Indonesia	Sumatra	Toba	1.00	0.96	-	1.00
	Nias	Gomo	1.00	0.99	-	1.00
	Nias	Hilitobara	1.00	0.87	-	1.00
	Mentawai	Mentawai	1.00	1.00	-	1.00
	Java	Dieng	0.98	0.92	-	1.00
	Java	Javanese	1.00	0.96	-	1.00
	Borneo	Long Gi-Berau	1.00	0.00	-	1.00
	Borneo	Long Soluy-Berau	1.00	0.99	-	1.00
	Borneo	Pampang-Samarinda	1.00	0.93	-	1.00
	Bali	Apit Yeh	1.00	0.91	-	1.00
	Bali	Bena	1.00	0.96	-	1.00
	Bali	Jaka	0.95	0.79	-	1.00
	Bali	Pulau Akitan	1.00	0.92	-	1.00
	Bali	Sungi1	1.00	1.00	-	1.00
	Bali	Tungkub1	1.00	0.96	-	1.00
	Bali	Uma Poh	1.00	0.95	-	1.00
	Sulawesi	Bugis	0.95	0.86	-	1.00

	Sulawesi	Kajang	0.95	0.88	-	1.00
	Sulawesi	Toraja	1.00	0.95	-	1.00
	Flores	Bama	0.56	0.22	-	0.63
	Flores	Bena	0.60	0.56	-	0.65
	Flores	Bere Manggarai	0.82	0.00	-	1.00
	Flores	Boawae	0.61	0.56	-	0.69
	Flores	Cibol	0.75	0.69	-	1.00
	Flores	Rampasasa	0.77	0.70	-	0.90
	Flores	Seso Borowa	0.62	0.58	-	0.66
	Flores/Lembata	Timur Hadakewa	0.63	0.54	-	0.75
	Flores	Wogo	0.62	0.57	-	0.66
	Flores	Woloara	0.63	0.58	-	0.68
	Sumba	Anakalang	0.82	0.77	-	0.89
	Sumba	Bilur Pangadu	0.78	0.74	-	0.83
	Sumba	Kodi	0.83	0.77	-	0.91
	Sumba	Lamboya	0.78	0.73	-	0.86
	Sumba	Loli	0.80	0.75	-	0.87
	Sumba	Mahu	0.80	0.73	-	0.86
	Sumba	Mamboro	0.81	0.77	-	0.88
	Sumba	Mbukambero	0.82	0.78	-	0.87
	Sumba	Praibakul	0.78	0.73	-	0.85
	Sumba	Rindi	0.87	0.78	-	1.00
	Sumba	Waimangura	0.84	0.79	-	0.92
	Sumba	Wanokaka	0.81	0.76	-	0.87
	Sumba	Wunga	0.80	0.76	-	0.86
	Alor	Alor	0.51	0.44	-	0.59
Melanesia	Papua New Guinea	Coastal	0.14	0.00	-	0.23
	Bismarck Archipelago	New Britain	0.00	0.00	-	0.00
	Bougainville	Nasioi	0.00	0.00	-	0.03
	Vanuatu	Maewo	0.06	0.00	-	0.15

**Table S4. Asian admixture rates inferred from autosomal SNPs.**

<b>Region</b>	<b>Location</b>	<b>Population</b>	<b>Asian Admixture</b>	<b>95% Confidence Interval</b>		
Mainland Asia	China	Miao	1.00	0.99	-	1.00
	China	She	1.00	0.99	-	1.00
	China	Tujia	1.00	0.99	-	1.00
	China	Yao	1.00	0.98	-	1.00
	China	Yi	1.00	0.99	-	1.00
	Vietnam	Vietnamese	1.00	0.96	-	1.00
ISEA	Taiwan	Hakka	1.00	0.97	-	1.00
	Taiwan	Aborigine	1.00	1.00	-	1.00
	Malaysia	Malaysians	0.97	0.86	-	1.00
	Philippines	Aeta	1.00	0.89	-	1.00
	Philippines	Filipino	1.00	0.90	-	1.00
Indonesia	Sumatra	Toba	1.00	0.91	-	1.00
	Nias	Gomo	1.00	0.94	-	1.00
	Nias	Hilitobara	1.00	0.92	-	1.00
	Mentawai	Mentawai	1.00	1.00	-	1.00
	Java	Dieng	0.96	0.92	-	1.00
	Java	Javanese	1.00	0.93	-	1.00
	Borneo	Long Gi-Berau	0.98	0.90	-	1.00
	Borneo	Long Soluy-Berau	1.00	0.91	-	1.00
	Borneo	Pampang-Samarinda	1.00	0.95	-	1.00
	Bali	Apit Yeh	0.94	0.80	-	1.00
	Bali	Bena	0.97	0.90	-	1.00
	Bali	Jaka	0.87	0.62	-	1.00
	Bali	Pulau Akitan	1.00	0.93	-	1.00
	Bali	Sungi1	0.97	0.90	-	1.00
	Bali	Tungkub1	0.94	0.87	-	1.00
	Bali	Uma Poh	0.99	0.90	-	1.00
	Sulawesi	Bugis	0.90	0.77	-	1.00

	Sulawesi	Kajang	0.91	0.85	-	0.97
	Sulawesi	Toraja	0.93	0.88	-	0.98
	Flores	Bama	0.57	0.51	-	0.64
	Flores	Bena	0.62	0.57	-	0.67
	Flores	Bere Manggarai	0.64	0.55	-	0.74
	Flores	Boawae	0.52	0.47	-	0.58
	Flores	Cibol	0.67	0.62	-	0.73
	Flores	Rampasasa	0.72	0.67	-	0.78
	Flores	Seso Borowa	0.62	0.57	-	0.67
	Flores/Lembata	Timur Hadakewa	0.56	0.46	-	0.66
	Flores	Wogo	0.64	0.59	-	0.69
	Flores	Woloara	0.61	0.55	-	0.67
	Sumba	Anakalang	0.71	0.67	-	0.76
	Sumba	Bilur Pangadu	0.71	0.66	-	0.75
	Sumba	Kodi	0.72	0.67	-	0.76
	Sumba	Lamboya	0.72	0.67	-	0.78
	Sumba	Loli	0.70	0.65	-	0.75
	Sumba	Mahu	0.73	0.68	-	0.79
	Sumba	Mamboro	0.76	0.71	-	0.80
	Sumba	Mbukambero	0.81	0.75	-	0.88
	Sumba	Praibakul	0.73	0.68	-	0.79
	Sumba	Rindi	0.81	0.72	-	0.90
	Sumba	Waimangura	0.75	0.70	-	0.80
	Sumba	Wanokaka	0.77	0.72	-	0.83
	Sumba	Wunga	0.75	0.70	-	0.80
	Alor	Alor	0.49	0.38	-	0.60
Melanesia	Papua New Guinea	Coastal	0.13	0.01	-	0.23
	Bismarck Archipelago	New Britain	0.00	0.00	-	0.00
	Bougainville	Nasioi	0.00	0.00	-	0.04
	Vanuatu	Maewo	0.02	0.00	-	0.14

**Table S5. Asian admixture rates inferred from X chromosomal SNPs.**

<b>Region</b>	<b>Location</b>	<b>Population</b>	<b>Asian Admixture</b>	<b>95% Confidence Interval</b>		
Mainland Asia	China	Miao	1.00	0.98	-	1.00
	China	She	1.00	1.00	-	1.00
	China	Tujia	1.00	1.00	-	1.00
	China	Yao	1.00	1.00	-	1.00
	China	Yi	1.00	0.97	-	1.00
	Vietnam	Vietnamese	1.00	0.91	-	1.00
ISEA	Taiwan	Hakka	1.00	0.98	-	1.00
	Taiwan	Aborigine	1.00	0.92	-	1.00
	Malaysia	Malaysians	0.99	0.81	-	1.00
	Philippines	Aeta	0.83	0.55	-	1.00
	Philippines	Filipino	1.00	0.96	-	1.00
Indonesia	Sumatra	Toba	1.00	0.95	-	1.00
	Nias	Gomo	1.00	1.00	-	1.00
	Nias	Hilitobara	1.00	0.00	-	1.00
	Mentawai	Mentawai	1.00	0.92	-	1.00
	Java	Dieng	1.00	0.89	-	1.00
	Java	Javanese	1.00	0.95	-	1.00
	Borneo	Long Gi-Berau	1.00	0.00	-	1.00
	Borneo	Long Soluy-Berau	1.00	0.97	-	1.00
	Borneo	Pampang-Samarinda	1.00	0.00	-	1.00
	Bali	Apit Yeh	1.00	0.93	-	1.00
	Bali	Bena	1.00	0.98	-	1.00
	Bali	Jaka	1.00	0.84	-	1.00
	Bali	Pulau Akitan	0.97	0.81	-	1.00
	Bali	Sungi1	1.00	1.00	-	1.00
	Bali	Tungkub1	1.00	0.99	-	1.00
	Bali	Uma Poh	1.00	0.93	-	1.00
	Sulawesi	Bugis	1.00	0.89	-	1.00



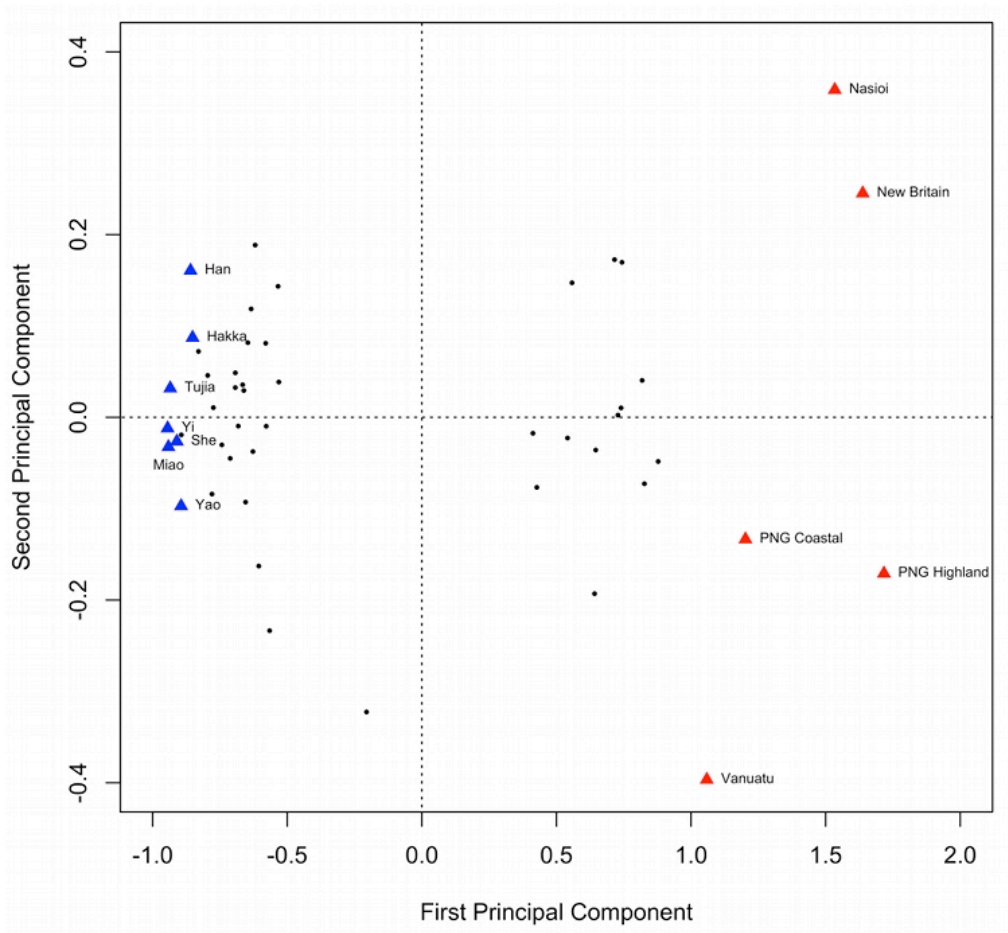
	Sulawesi	Kajang	0.98	0.87	-	1.00
	Sulawesi	Toraja	1.00	0.98	-	1.00
	Flores	Bama	0.55	0.08	-	0.67
	Flores	Bena	0.59	0.53	-	0.66
	Flores	Bere Manggarai	0.92	0.00	-	1.00
	Flores	Boawae	0.70	0.60	-	0.80
	Flores	Cibol	0.81	0.71	-	1.00
	Flores	Rampasasa	0.80	0.70	-	0.96
	Flores	Seso Borowa	0.61	0.55	-	0.68
	Flores/Lembata	Timur Hadakewa	0.69	0.55	-	0.87
	Flores	Wogo	0.59	0.52	-	0.67
	Flores	Woloara	0.66	0.58	-	0.74
	Sumba	Anakalang	0.89	0.82	-	0.97
	Sumba	Bilur Pangadu	0.85	0.78	-	0.92
	Sumba	Kodi	0.90	0.82	-	0.99
	Sumba	Lamboya	0.83	0.75	-	0.94
	Sumba	Loli	0.88	0.80	-	0.98
	Sumba	Mahu	0.85	0.73	-	0.94
	Sumba	Mamboro	0.86	0.79	-	0.95
	Sumba	Mbukambero	0.83	0.77	-	0.91
	Sumba	Praibakul	0.82	0.74	-	0.93
	Sumba	Rindi	0.92	0.76	-	1.00
	Sumba	Waimangura	0.91	0.83	-	1.00
	Sumba	Wanokaka	0.84	0.76	-	0.94
	Sumba	Wunga	0.85	0.78	-	0.93
	Alor	Alor	0.54	0.43	-	0.65
Melanesia	Papua New Guinea	Coastal	0.16	0.00	-	0.31
	Bismarck Archipelago	New Britain	0.00	0.00	-	0.00
	Bougainville	Nasioi	0.00	0.00	-	0.10
	Vanuatu	Maewo	0.14	0.02	-	0.25

**Table S6. Autosomal/X chromosomal differences in admixture rates.**

Region	Location	Population	Asian Admixture		Difference	Female Preference
			A	X		
Mainland Asia	China	Miao	1.00	1.00	0.00	0
	China	She	1.00	1.00	0.00	0
	China	Tujia	1.00	1.00	0.00	0
	China	Yao	1.00	1.00	0.00	0
	China	Yi	1.00	1.00	0.00	0
	Vietnam	Vietnamese	1.00	1.00	0.00	0
ISEA	Taiwan	Hakka	1.00	1.00	0.00	0
	Taiwan	Aborigine	1.00	1.00	0.00	0
	Malaysia	Malaysians	0.97	0.99	0.03	+
	Philippines	Aeta	1.00	0.83	-0.17	-
	Philippines	Filipino	1.00	1.00	0.00	0
Indonesia	Sumatra	Toba	1.00	1.00	0.00	0
	Nias	Gomo	1.00	1.00	0.00	0
	Nias	Hilitobara	1.00	1.00	0.00	0
	Mentawai	Mentawai	1.00	1.00	0.00	0
	Java	Dieng	0.96	1.00	0.04	+
	Java	Javanese	1.00	1.00	0.00	0
	Borneo	Long Gi-Berau	0.98	1.00	0.02	+
	Borneo	Long Soluy-Berau	1.00	1.00	0.00	0
	Borneo	Pampang-Samarinda	1.00	1.00	0.00	0
	Bali	Apit Yeh	0.94	1.00	0.06	+
	Bali	Bena	0.97	1.00	0.03	+
	Bali	Jaka	0.87	1.00	0.13	+
	Bali	Pulau Akitan	1.00	0.97	-0.03	-
	Bali	Sungi1	0.97	1.00	0.03	+
	Bali	Tungkub1	0.94	1.00	0.06	+
	Bali	Uma Poh	0.99	1.00	0.01	+

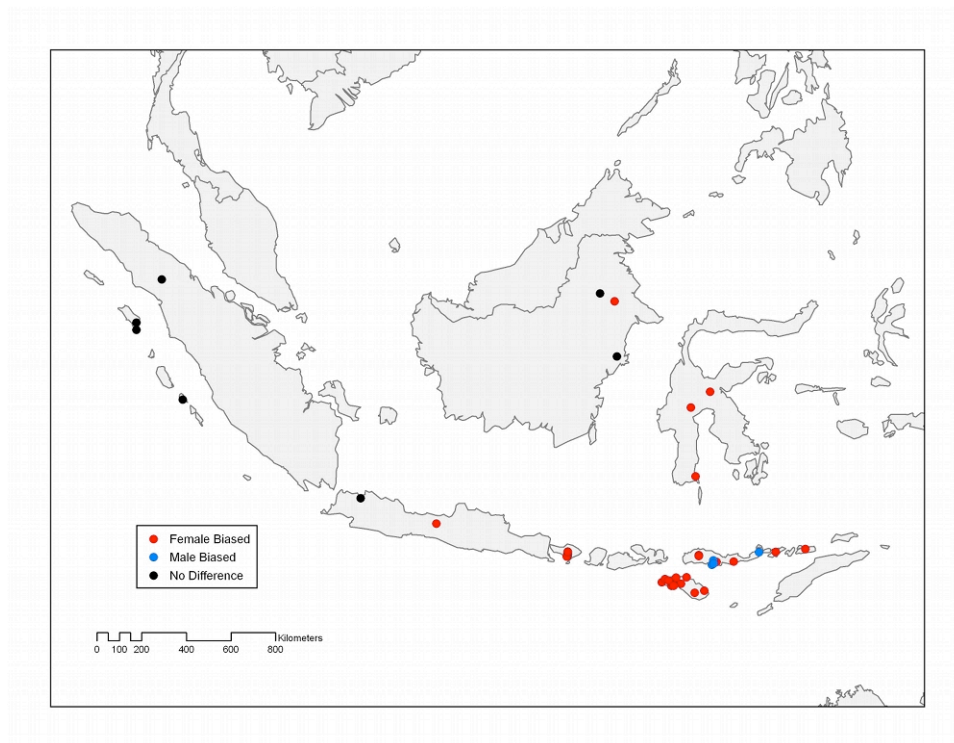
	Sulawesi	Bugis	0.90	1.00	0.10	+
	Sulawesi	Kajang	0.91	0.98	0.07	+
	Sulawesi	Toraja	0.93	1.00	0.07	+
	Flores	Bama	0.57	0.55	-0.02	-
	Flores	Bena	0.62	0.59	-0.03	-
	Flores	Bere Manggarai	0.64	0.92	0.28	+
	Flores	Boawae	0.52	0.70	0.17	+
	Flores	Cibol	0.67	0.81	0.14	+
	Flores	Rampasasa	0.72	0.80	0.08	+
	Flores	Seso Borowa	0.62	0.61	-0.01	-
	Flores/Lembata	Timur Hadakewa	0.56	0.69	0.13	+
	Flores	Wogo	0.64	0.59	-0.04	-
	Flores	Woloara	0.61	0.66	0.05	+
	Sumba	Anakalang	0.71	0.89	0.17	+
	Sumba	Bilur Pangadu	0.71	0.85	0.14	+
	Sumba	Kodi	0.72	0.90	0.18	+
	Sumba	Lamboya	0.72	0.83	0.11	+
	Sumba	Loli	0.70	0.88	0.18	+
	Sumba	Mahu	0.73	0.85	0.11	+
	Sumba	Mamboro	0.76	0.86	0.10	+
	Sumba	Mbukambero	0.81	0.83	0.02	+
	Sumba	Praibakul	0.73	0.82	0.09	+
	Sumba	Rindi	0.81	0.92	0.11	+
	Sumba	Waimangura	0.75	0.91	0.16	+
	Sumba	Wanokaka	0.77	0.84	0.07	+
	Sumba	Wunga	0.75	0.85	0.10	+
	Alor	Alor	0.49	0.54	0.04	+
Melanesia	Papua New Guinea	Coastal	0.13	0.16	0.03	+
	Bismarck Archipelago	New Britain	0.00	0.00	0.00	0
	Bougainville	Nasioi	0.00	0.00	0.00	0
	Vanuatu	Maewo	0.02	0.14	0.12	+

**Figure S1**



**Fig. S1.** Principal Component Analysis (PCA) of 7 Asian populations, 5 Melanesian populations, and 37 genotyped SNPs. Asian populations are shown in blue; Melanesian populations in red; and SNPs in black. The first principal component (x-axis) describes most of the variation (52%); the second principal component (y-axis) describes only 7%.

**Figure S2**



**Fig. S2.** Spatial distribution of Asian admixture in Indonesia. Populations with female biased Asian admixture are indicated in red; populations with male biased Asian admixture in blue; and populations with no difference in admixture rates in black.