

Table S2 Populations outside of East Asia have a symmetric relationship with the Ainu and East Asian farmer populations (Ami, Atayal, Dai, Lahu and Sherpa), suggesting that the Ainu do not harbor substantial non-East Asian ancestry. Patterson’s D statistic was calculated in the form of $D(\text{Pop1}, \text{Pop2}; \text{Pop3}, \text{Pop4})$, using Yoruba as an outgroup (Pop1).

Pop1	Pop2	Pop3	Pop4	D	Z	
Yoruba	Sardinian	Ainu	Ami	-0.0035	-1.331	
			Atayal	-0.0043	-1.481	
			Dai	-0.0057	-2.305	
			Lahu	-0.0049	-1.907	
			Sherpa	-0.0031	-1.249	
	MA1			Ami	-0.0039	-0.714
				Atayal	-0.0028	-0.469
				Dai	-0.0009	-0.173
				Lahu	-0.0023	-0.423
				Sherpa	0.0037	0.696
	Karitiana			Ami	0.0045	1.269
				Atayal	0.0039	1.007
				Dai	0.0007	0.194
				Lahu	0.0026	0.704
				Sherpa	0.0017	0.480
	Papuan			Ami	0.0028	0.816
				Atayal	-0.0021	-0.597
				Dai	-0.0009	-0.286
				Lahu	-0.0021	-0.611
				Sherpa	-0.0033	-1.032