

Table S3 The Ainu form a clade with East Asian populations in comparison to contemporary populations outside of East Asia as well as to archaic hominins ($|D| < 3 \text{ SD}$), which suggests that the Ainu do not harbor a substantial amount of non-East Asian ancestry. Based on the “CND-1KG-Ainu” data set, Patterson’s D statistic was calculated in the form of $D(\text{Pop1}, \text{Pop2}; \text{Pop3}, \text{Pop4})$, using 1KG YRI as an outgroup (Pop1).

Pop1	Pop2	Pop3	Pop4	D	Z	
YRI	Altai	Ainu	JPT	-0.0011	-0.491	
			CHB	0.0000	-0.016	
			CHS	-0.0002	-0.074	
			KHV	-0.0006	-0.223	
			CDX	-0.0013	-0.520	
	Neandertal	Ainu	Sherpa	0.0003	0.068	
			Denisova	JPT	-0.0014	-0.679
				CHB	-0.0003	-0.115
				CHS	-0.0003	-0.124
				KHV	-0.0001	-0.064
	CDX	-0.0007		-0.322		
	CEU	Ainu	Sherpa	0.0008	0.219	
			GIH	JPT	-0.0024	-1.539
				CHB	-0.0016	-0.933
				CHS	-0.0034	-1.993
				KHV	-0.0036	-2.108
	CDX	-0.0048		-2.819		
	Papuan	Ainu	Sherpa	-0.0012	-0.488	
			Papuan	JPT	-0.0025	-1.749
				CHB	-0.0025	-1.593
CHS				-0.0030	-1.891	
KHV				-0.0027	-1.757	
CDX	-0.0038	-2.457				
Papuan	Ainu	Sherpa	-0.0027	-1.275		
		Papuan	JPT	-0.0010	-0.434	
			CHB	-0.0020	-0.805	
			CHS	-0.0009	-0.354	
			KHV	-0.0013	-0.505	
CDX	-0.0015		-0.562			
Papuan	Ainu	Sherpa	-0.0075	-1.949		