Supplementary Figure S1

Population substructure during Out-of-Africa dispersal with female migration cannot explain the results. The ratio $Q$ is plotted as a function of the level of female migration rate (log scale) in a model of two separate and equally-sized groups composing the founder population of non-Africans with only females migrating between groups. The horizontal black line provides the empirically observed $Q$ ratio. For clarity, the y-axis is scaled such that the ratio $Q$ with no migration is $\frac{3}{4}$, while in actuality it is $\sim 0.79$. This higher value is due to the population structure violating the assumptions underlying the translation of $F_{ST}$ estimates to effective population sizes (Keinan et al. 2009), and renders conservative the conclusion that such population structure cannot account for the magnitude of our results.