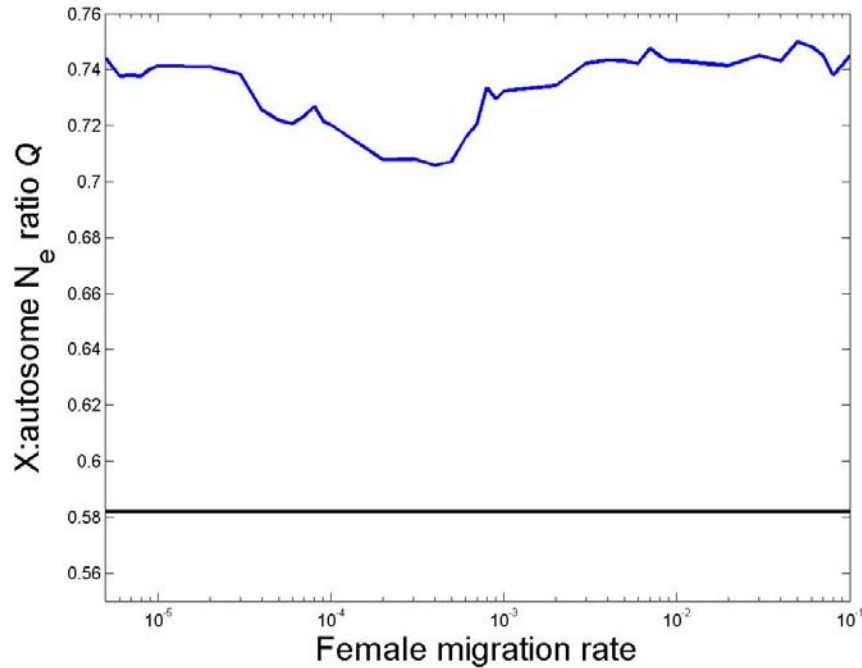


Supplementary Figure S1



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 ~ 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.