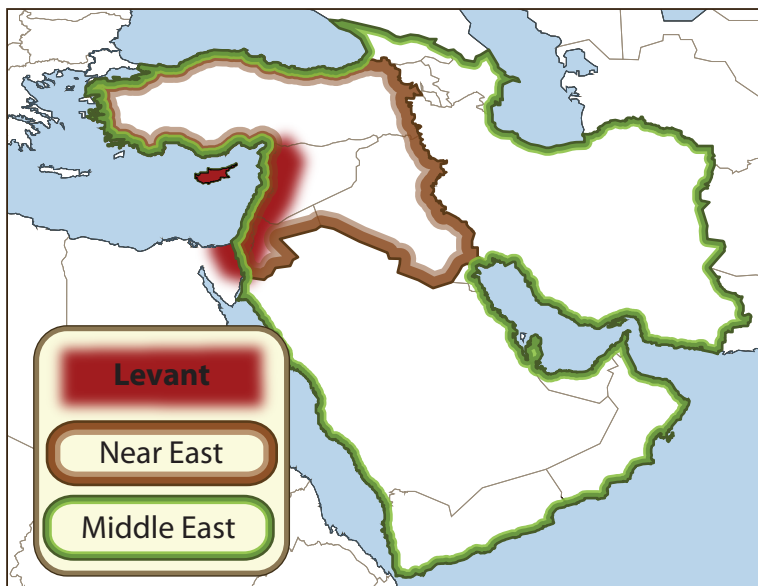


SUPPLEMENTARY INFORMATION

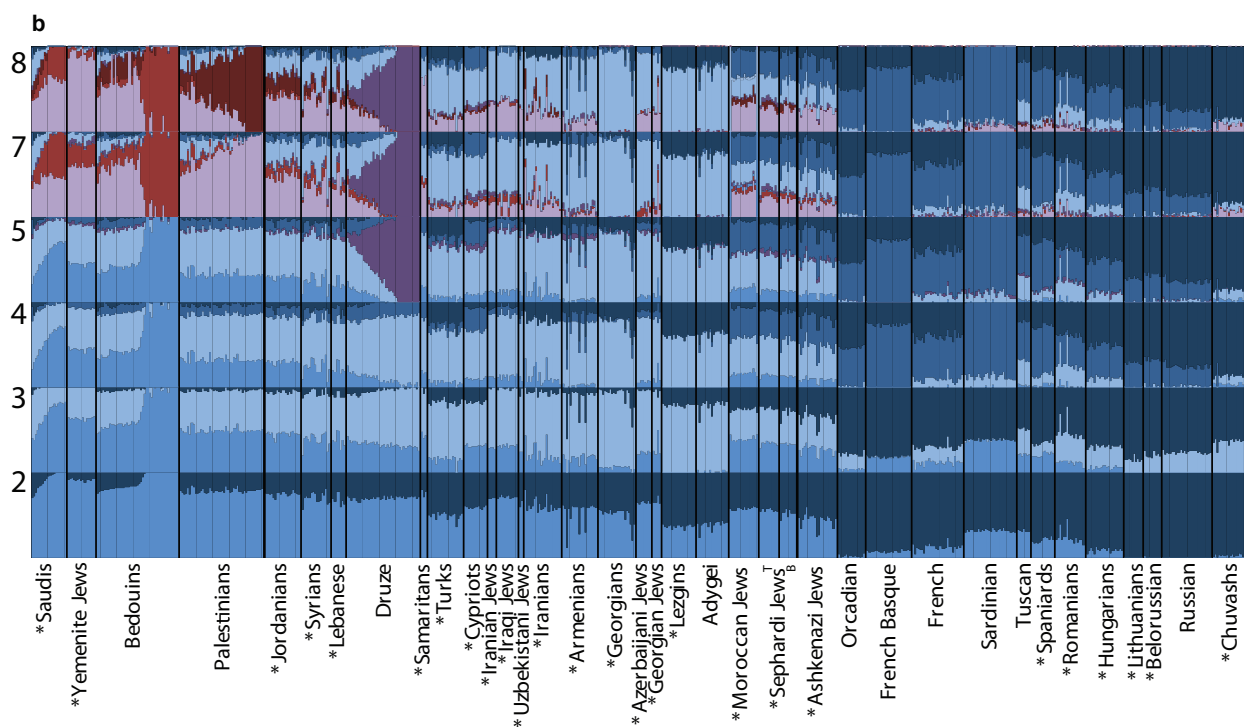
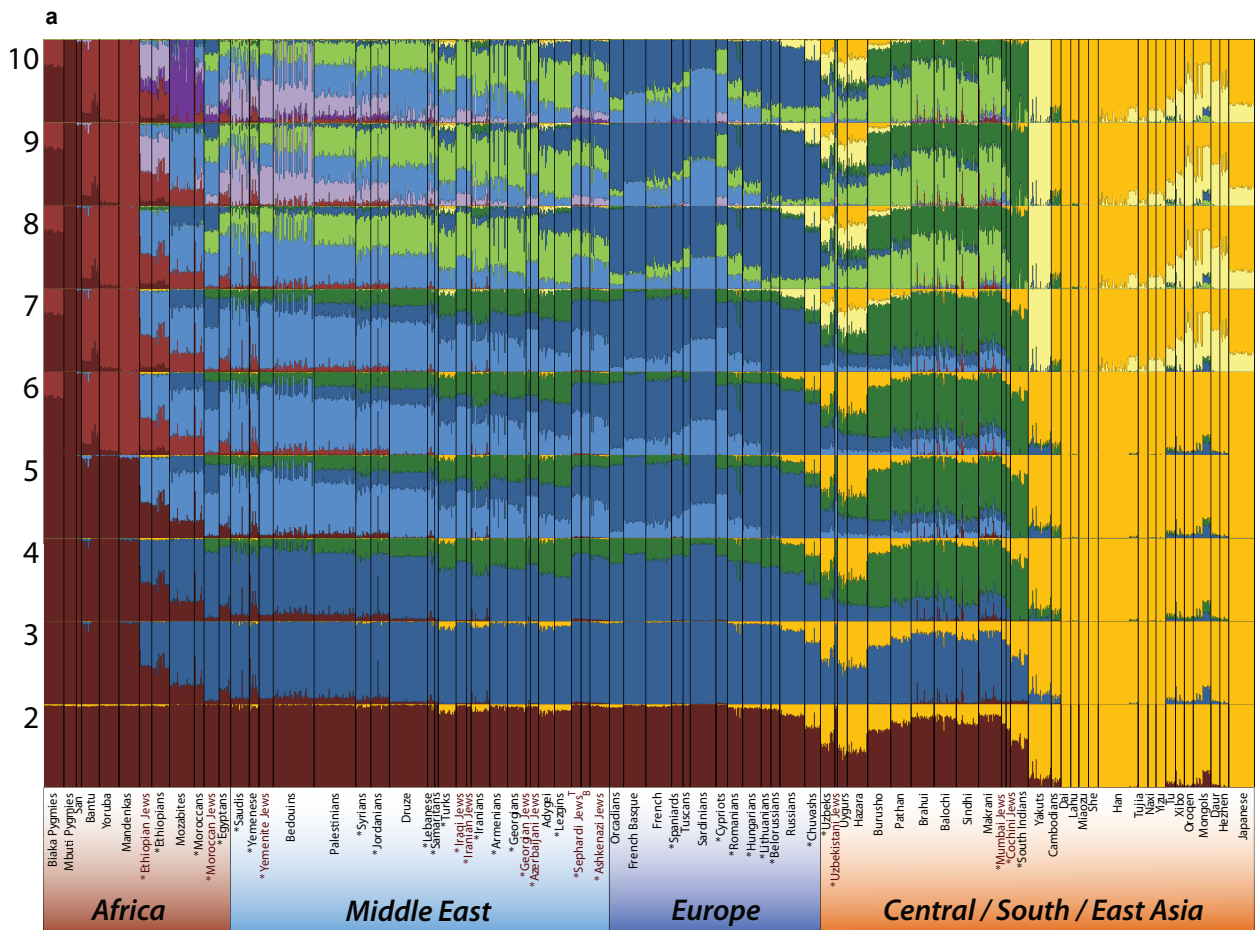


Supplementary Figure 1 | Map of region names as defined in this study. We note that the terms Middle East, Near East, and Western Asia have overlapping and often inconsistent meanings, both historically and currently in different fields of study. We use the term Levant as a geographically- rather than politically- defined region. For simplicity, we limit our geographic terminology throughout the paper to the terms Middle East and Levant.

Figures 2a-c are in separate file - see 'Supplementary Figures 2'

Supplementary Figure 2| Principal Component Analysis of the Old World High-Density

Array Data. a, Scatter plot of Old World individuals, showing the first two principal components. Here, the first PC (4.2% of variation, vertical axis) captures primarily differences between sub-Saharan Africans and the rest of the Old World. The second PC (3.4% of variation, horizontal axis) differentiates West Eurasians from South and East Asians. Axes of variation were scaled according to eigenvalues. Each letter code (**Supplementary Table 1**) corresponds to one individual and the color indicates population origin. **b**, Scatter plot of Old World individuals, showing PC1 and PC3. **c**, Scatter plot of Old World individuals, showing PC1 and PC4. Note that eigenvalues for PC3 and PC4 are ~8 times smaller than for PC1 and 2.



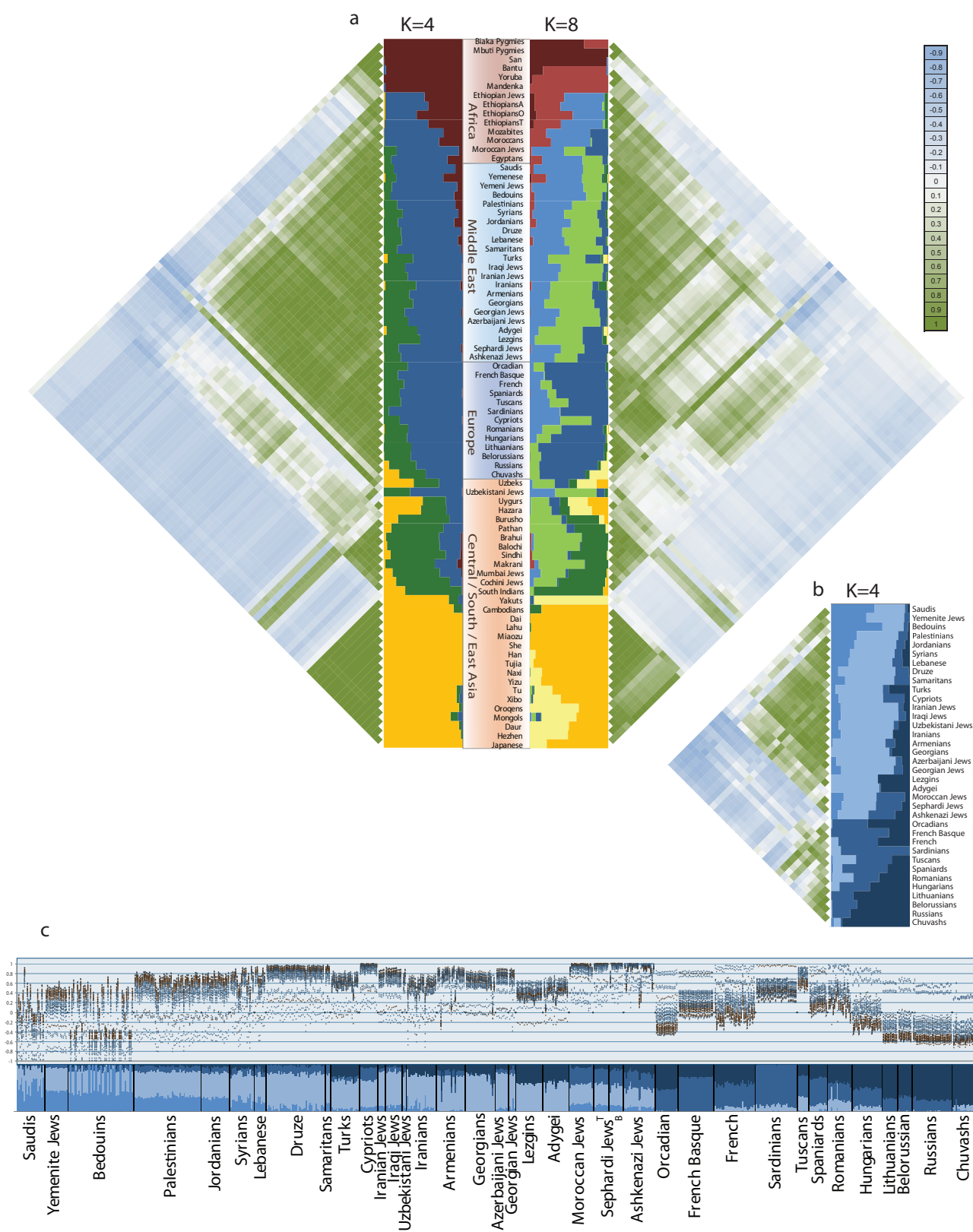
Supplementary Figure 4 | ADMIXTURE analysis of the Old World and West Eurasian

samples at K=2 through K=10. a, Jewish communities are shown in colour and in bold. The

letters T and B further specify Sephardi Jews from Turkey and Bulgaria, respectively.

Populations introduced in this study for the first time and analysed together with the HGDP¹⁸

data are marked by an asterisk. See **Supplementary note 3 and 4** for more details.



Supplementary Figure 5 | Correlation coefficients. **a**, Individual inferred memberships in genetic components at K=4 and K=8 of the Old World dataset are averaged to the population

