



**Figure S3:** Heat maps indicating among-lineage compositional heterogeneity when analysing the concatenated datasets (a) sm-aa, (b) sm-nt12, and (c) sm-nt123. SymTest heat maps are based on p-values obtained from Bowker's matched-pairs test of symmetry. P-values  $> 0.05$  are coloured in white and indicate sequence pairs fully matching SRH conditions.