

**S5 Fig. Structure plot of GTEx V6 tissue samples for  $K = 20$  in two runs under different thinning parameter settings.** (a)  $p_{thin} = 0.01$  and (b)  $p_{thin} = 0.0001$ . The structural patterns in these two plots closely resemble the structural patterns in Fig 1(a), though there are a few differences from the unthinned version.

