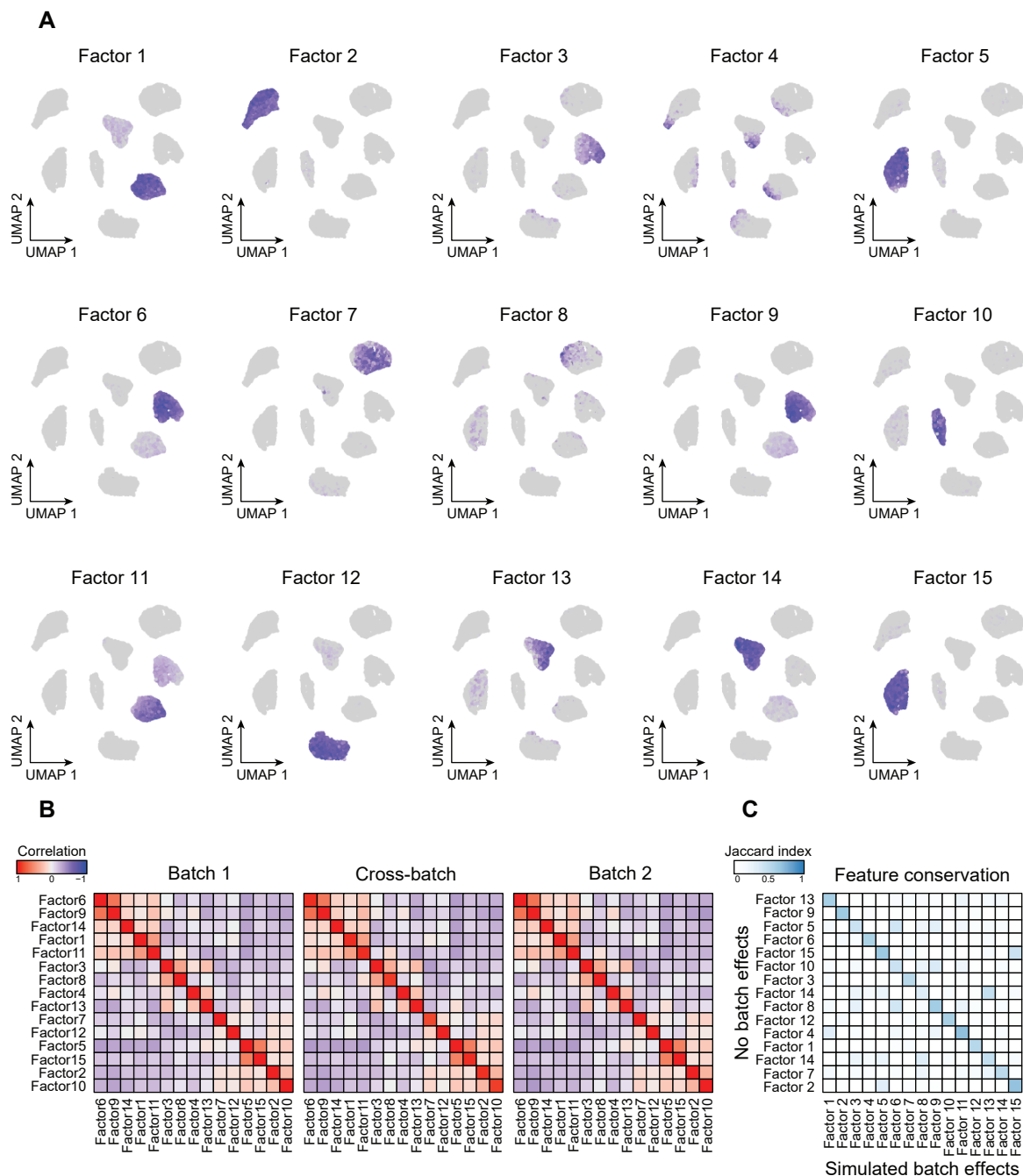


# Supplementary Figure 1



**Supplementary Figure 1: A)** UMAPs colored by module scores derived from JOINTLY factors in cell lines with simulated batch effects. **B)** Heatmap showing pairwise correlation of modules scores derived JOINTLY factor, within (left and right panel), and between batches (middle panel). **C)** Heatmap showing pairwise Jaccard index between factor gene sets from no-noise and noise datasets.