

## Supplementary information

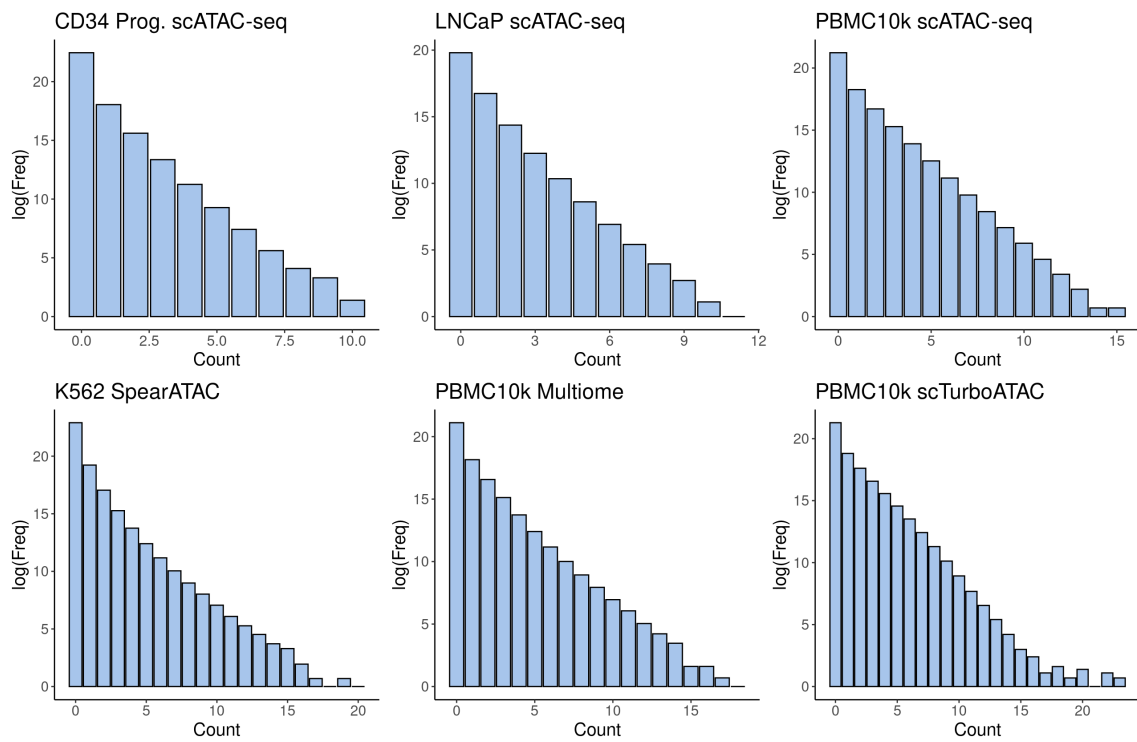


Figure S1: Histogram of paired-insertion counts (PIC) for all datasets analysed.

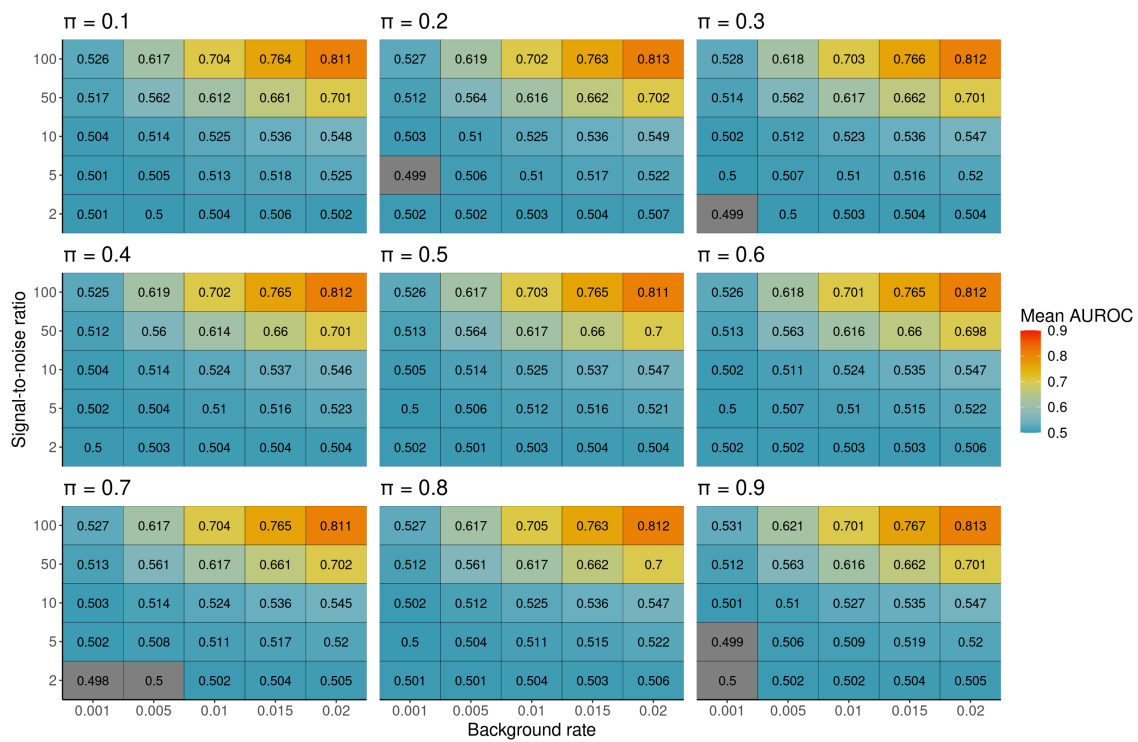


Figure S2: Simulations with varying  $\pi$ .

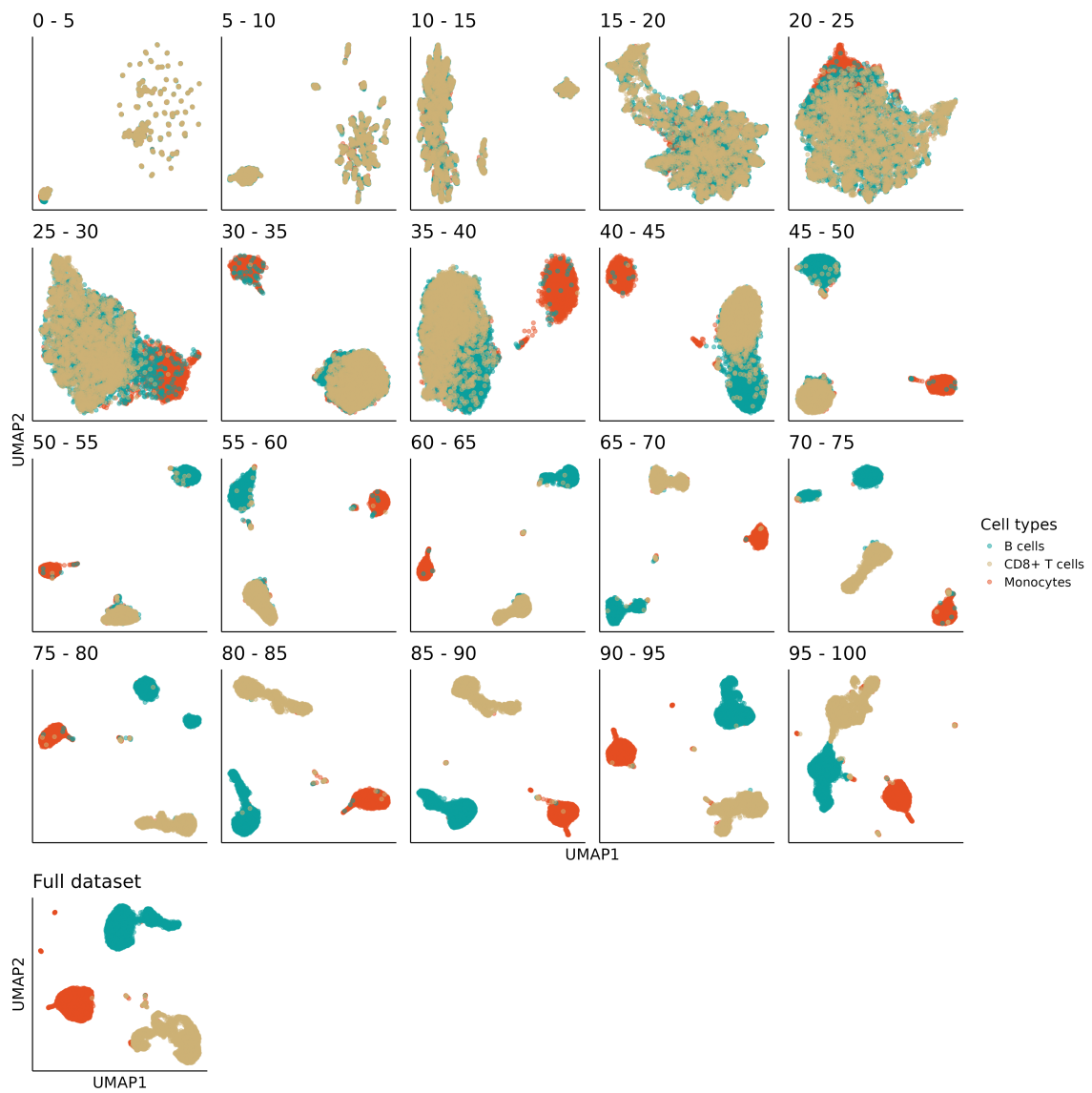


Figure S3: UMAPs of clustering with varying peak quantiles.