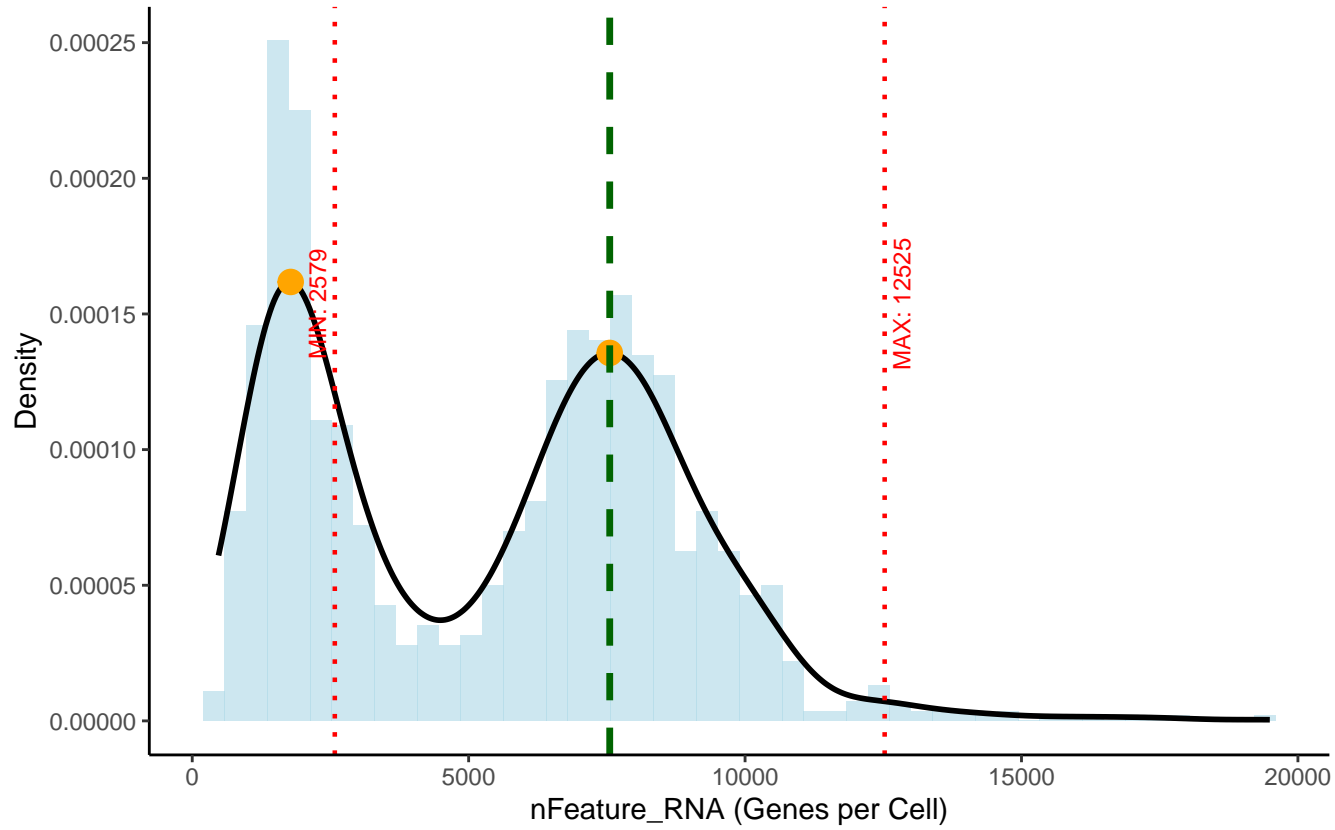


org_1A – Adaptive Threshold Determination

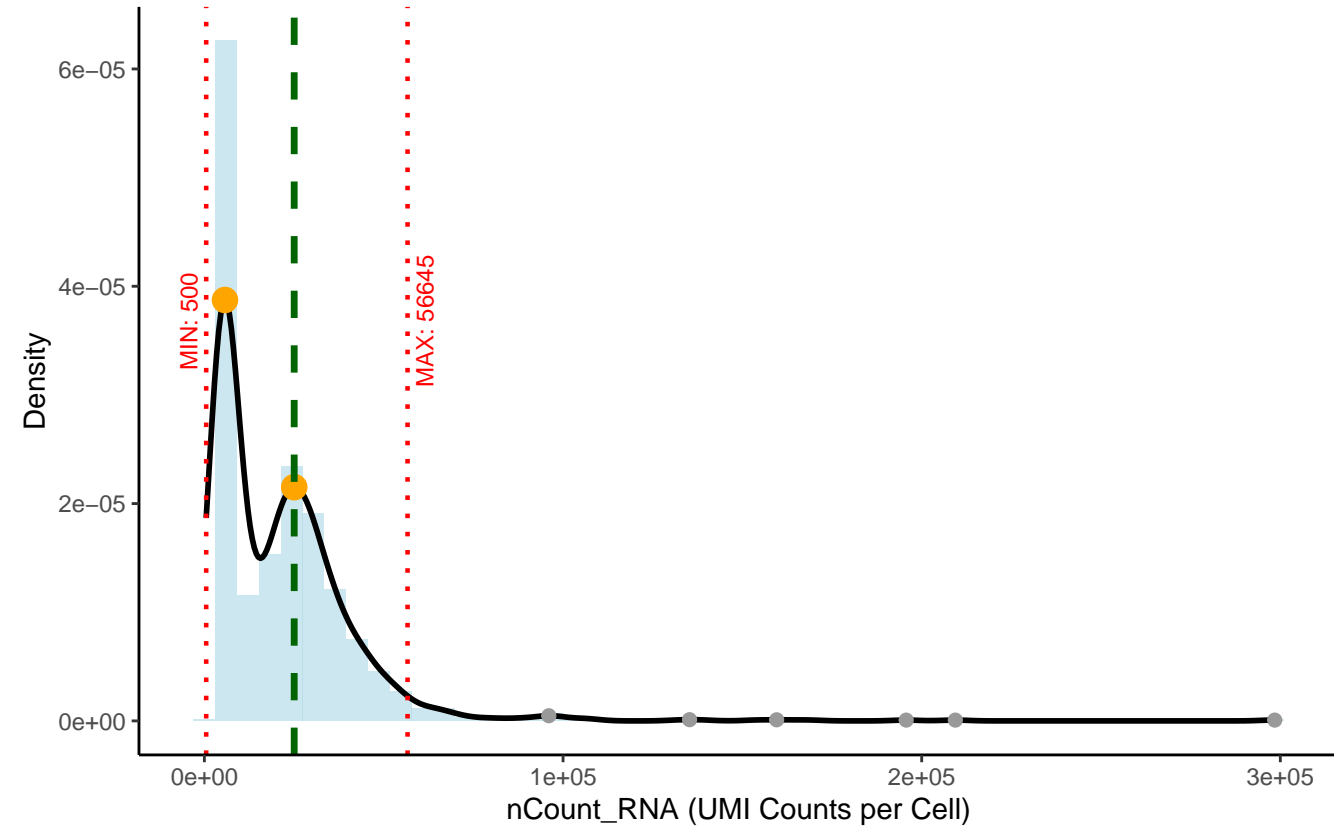
org_1A: nFeature_RNA (Genes per Cell) Distribution

Method: peak | Selected peak: 7552.2 | Total peaks: 2 | Top 2 peaks used



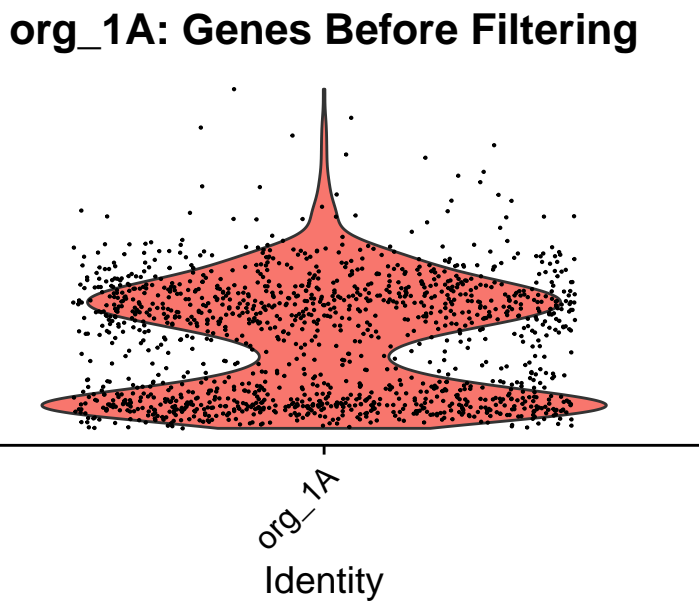
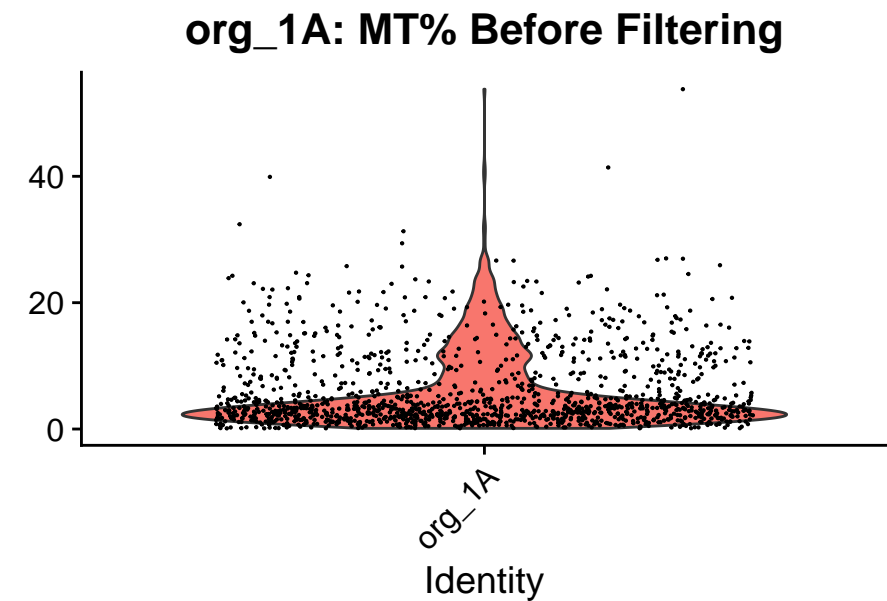
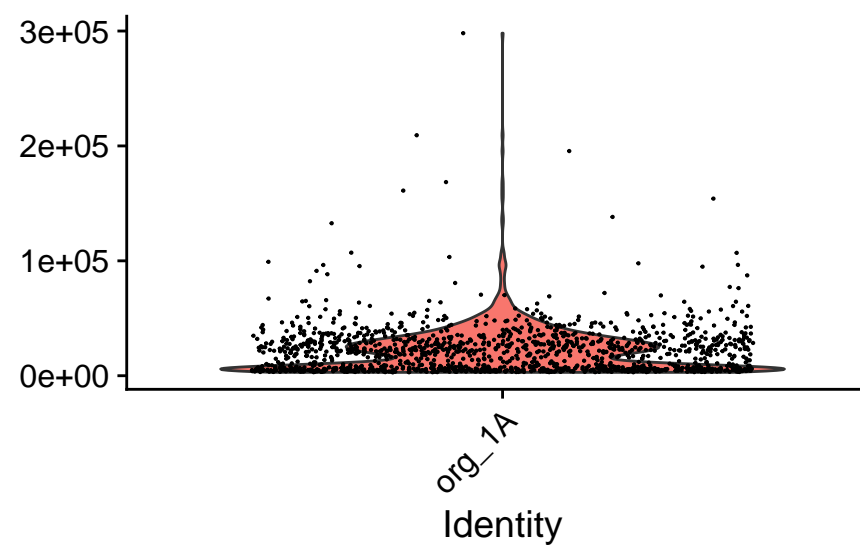
org_1A: nCount_RNA (UMI Counts per Cell) Distribution

Method: peak | Selected peak: 25041.8 | Total peaks: 8 | Top 2 peaks used

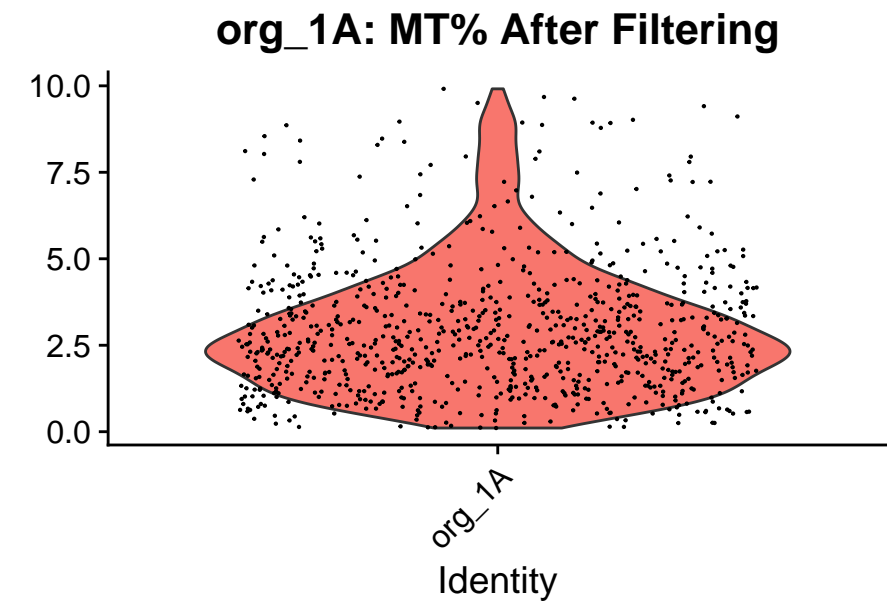
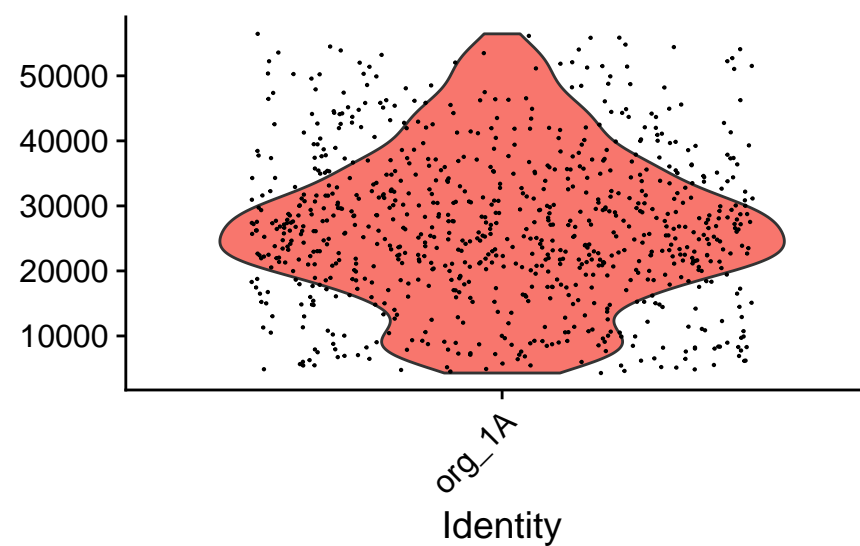


Metric	Method	Selected_Peak	Total_Peaks	Top2_Peaks	SD	MIN_Threshold	MAX_Threshold
nFeature_RNA	peak	7552	2	1781, 7552	3315	2579	12525
nCount_RNA	peak	25042	8	5735, 25042	21069	500	56645

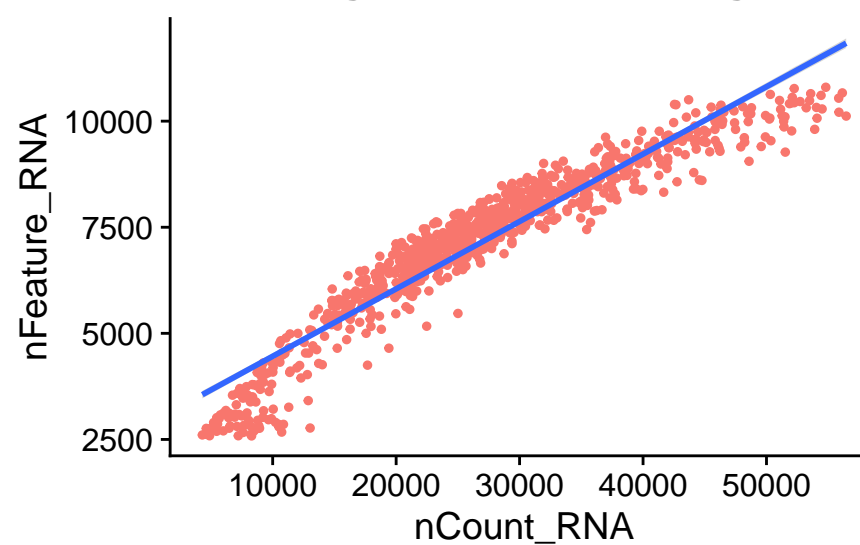
org_1A – Filtering Summary
org_1A: Counts Before Filtering



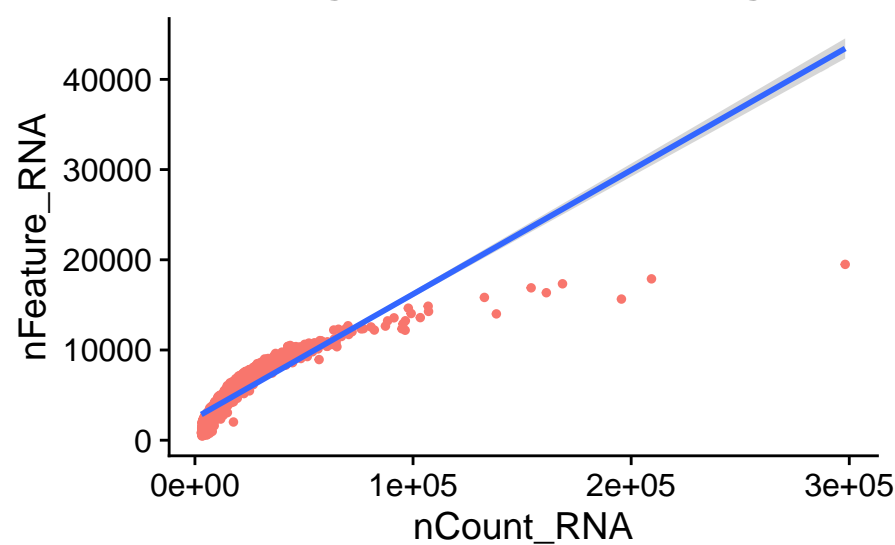
org_1A: Counts After Filtering



org_1A: After Filtering



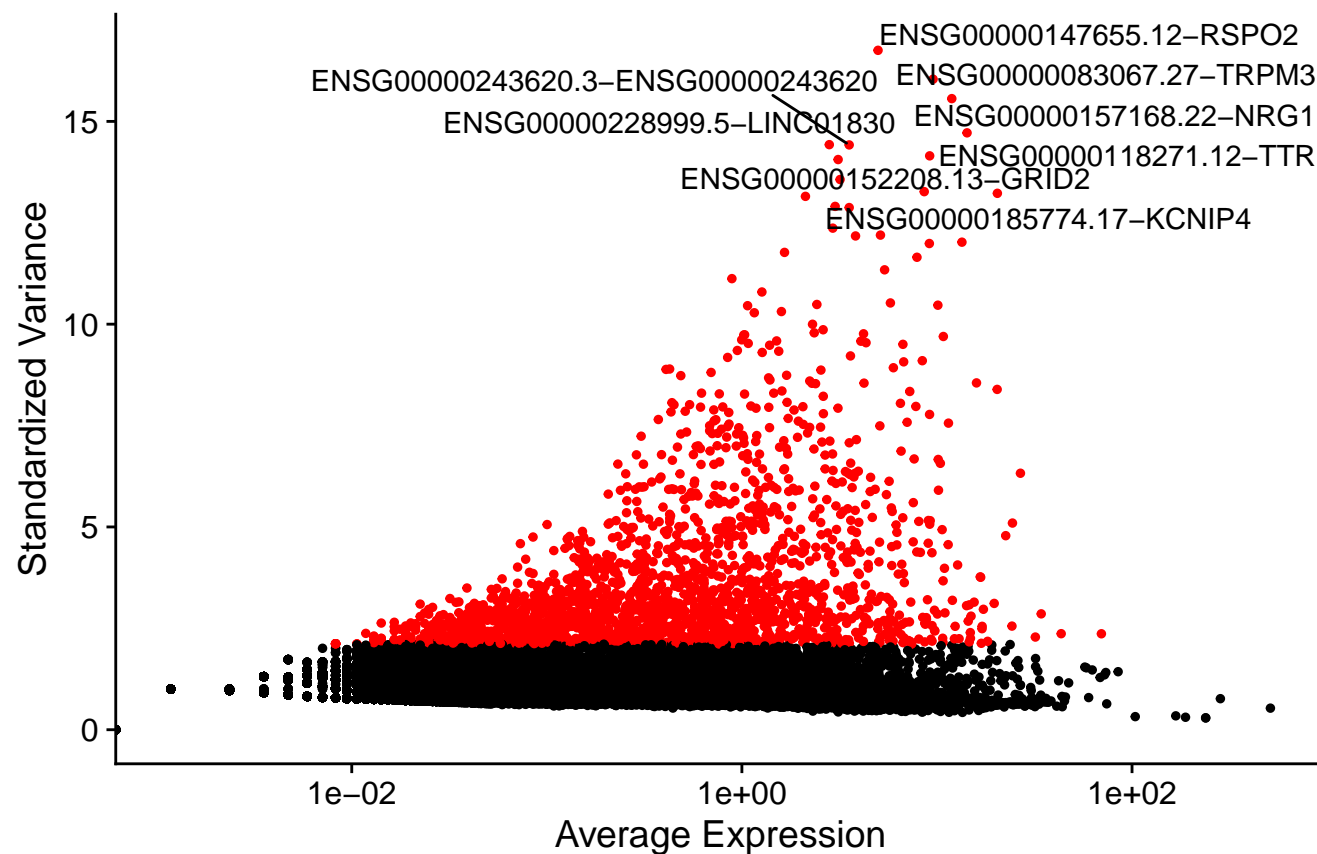
org_1A: Before Filtering



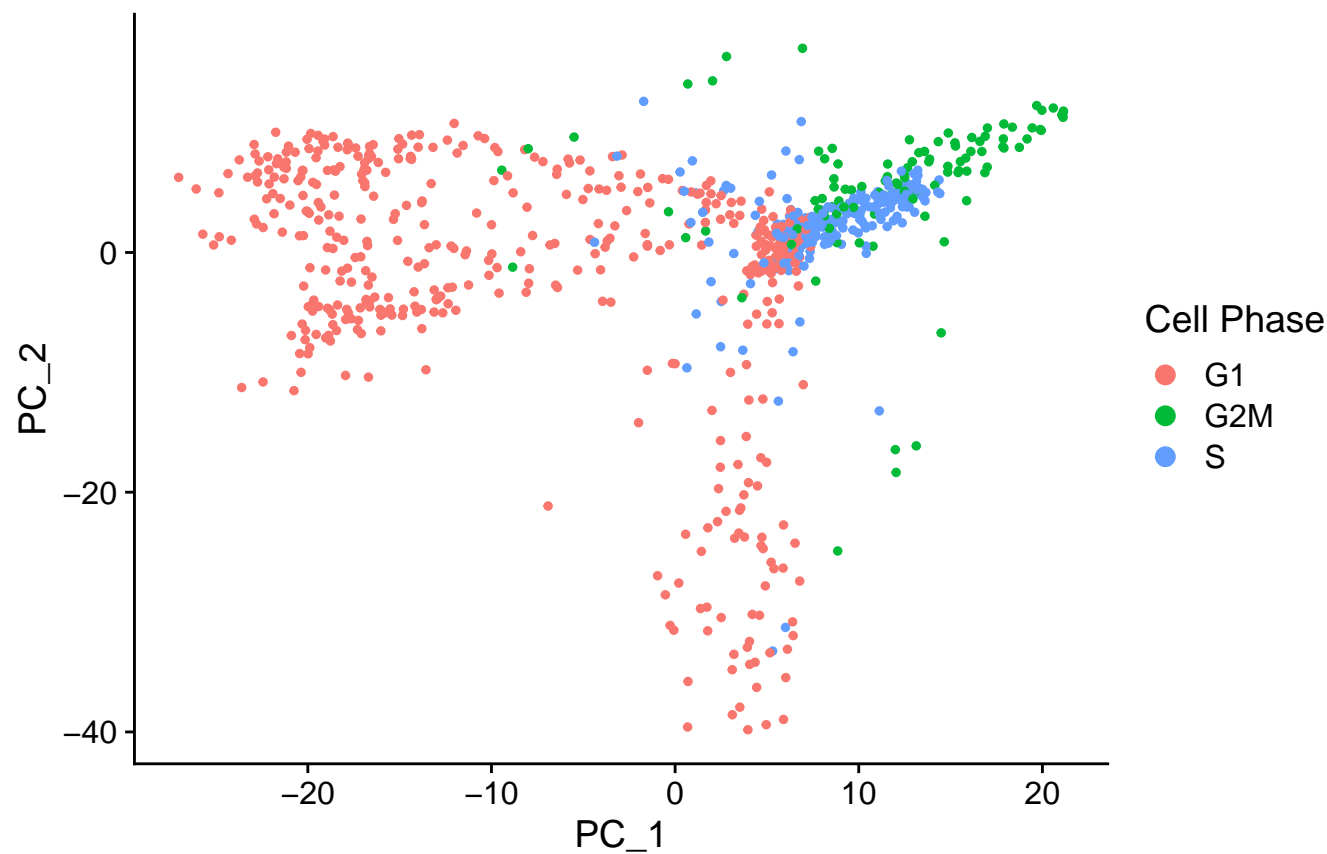
	Metric	Before	After
1	Cells	1398.000000	847.000000
2	Genes	42431.000000	42431.000000
3	Median nCount	18656.500000	26186.000000
4	Median nFeature	6038.500000	7383.000000
5	Median MT%	3.384393	2.581215

org_1A – Variable Features & Cell Cycle

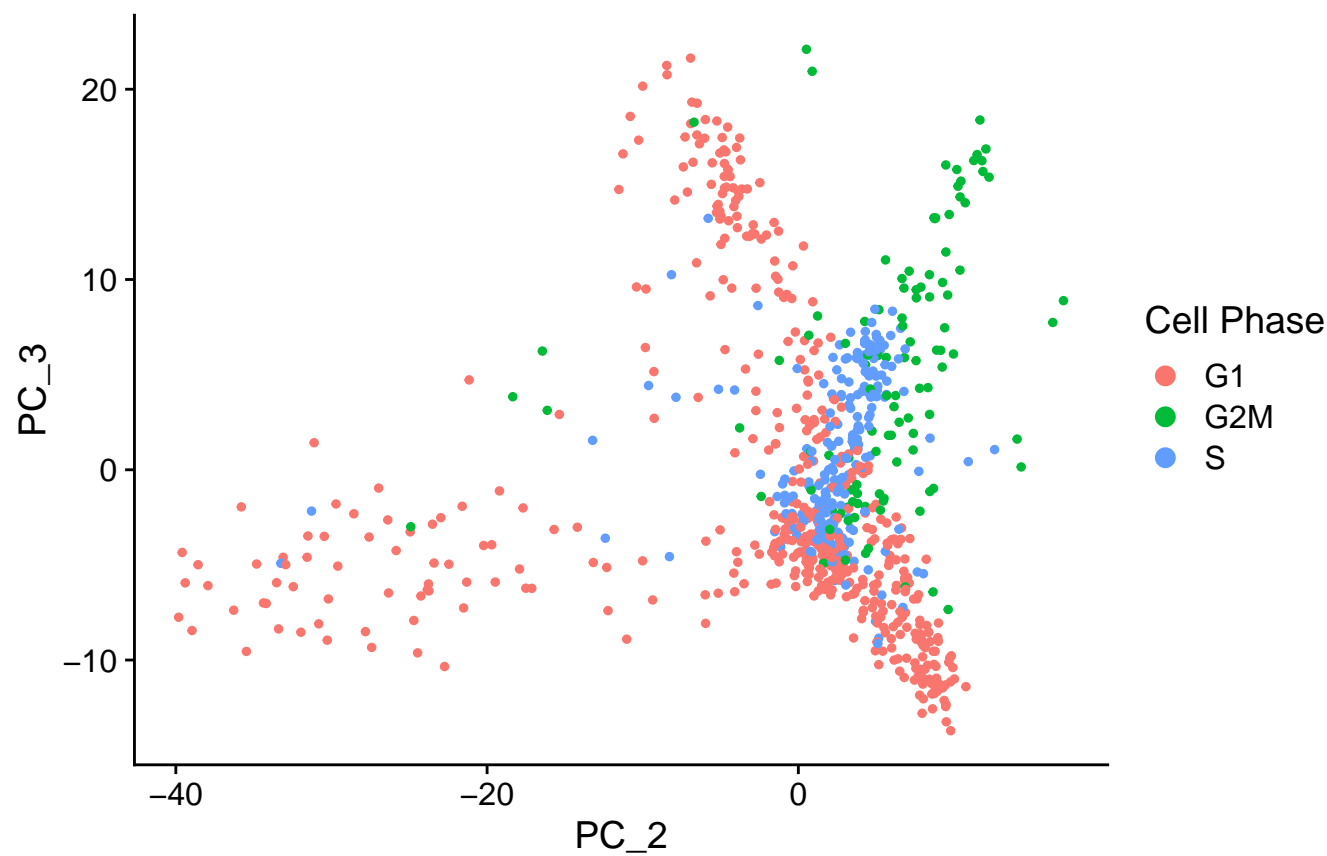
org_1A: Top 2000 Variable Genes



org_1A: Cell Cycle on PC1 & PC2



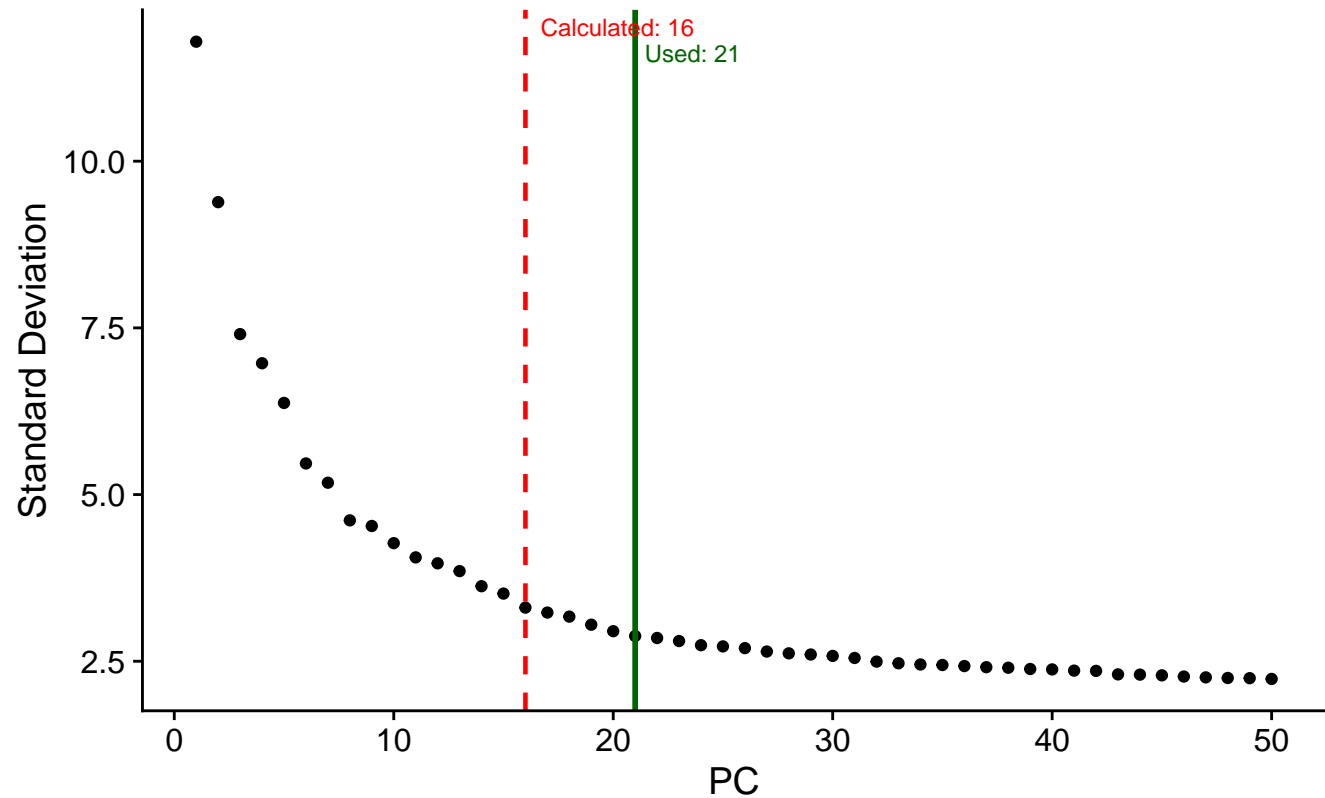
org_1A: Cell Cycle on PC2 & PC3



org_1A – PCA Selection & Silhouette Analysis

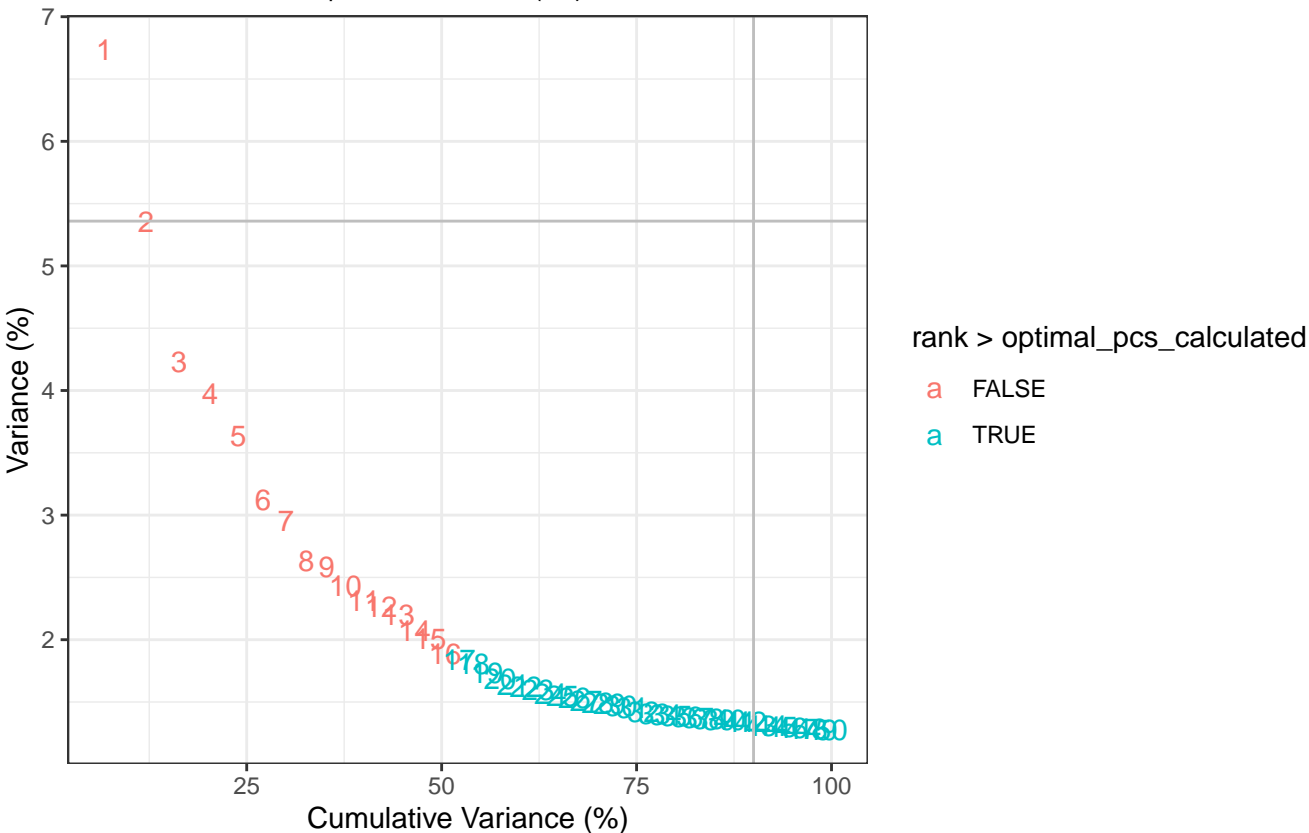
org_1A: Elbow Plot

Calculated: 16 PCs | Used: 21 PCs (+5)

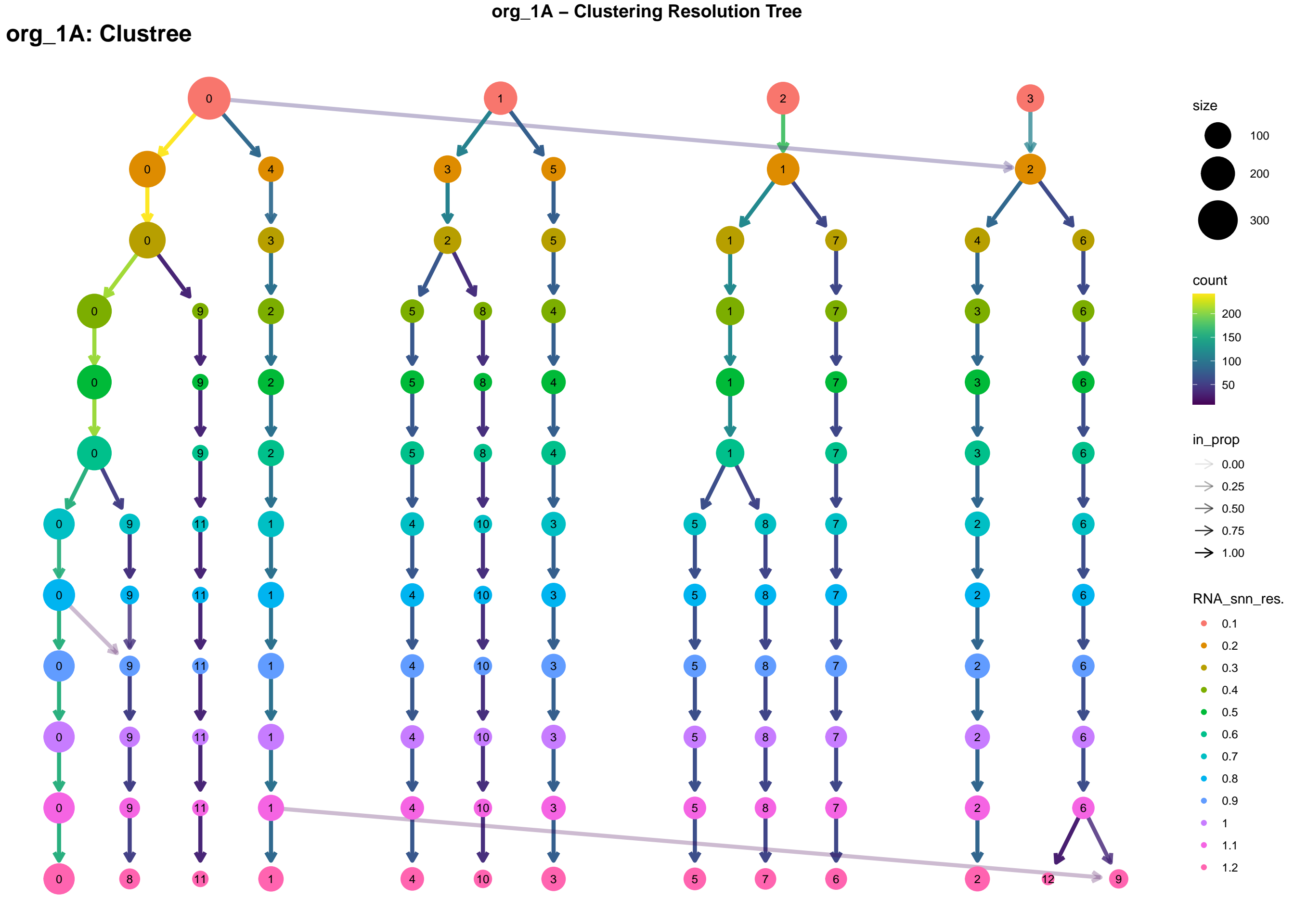


org_1A: Quantitative PC Selection

Calculated: 16 PCs | Used: 21 PCs (+5)

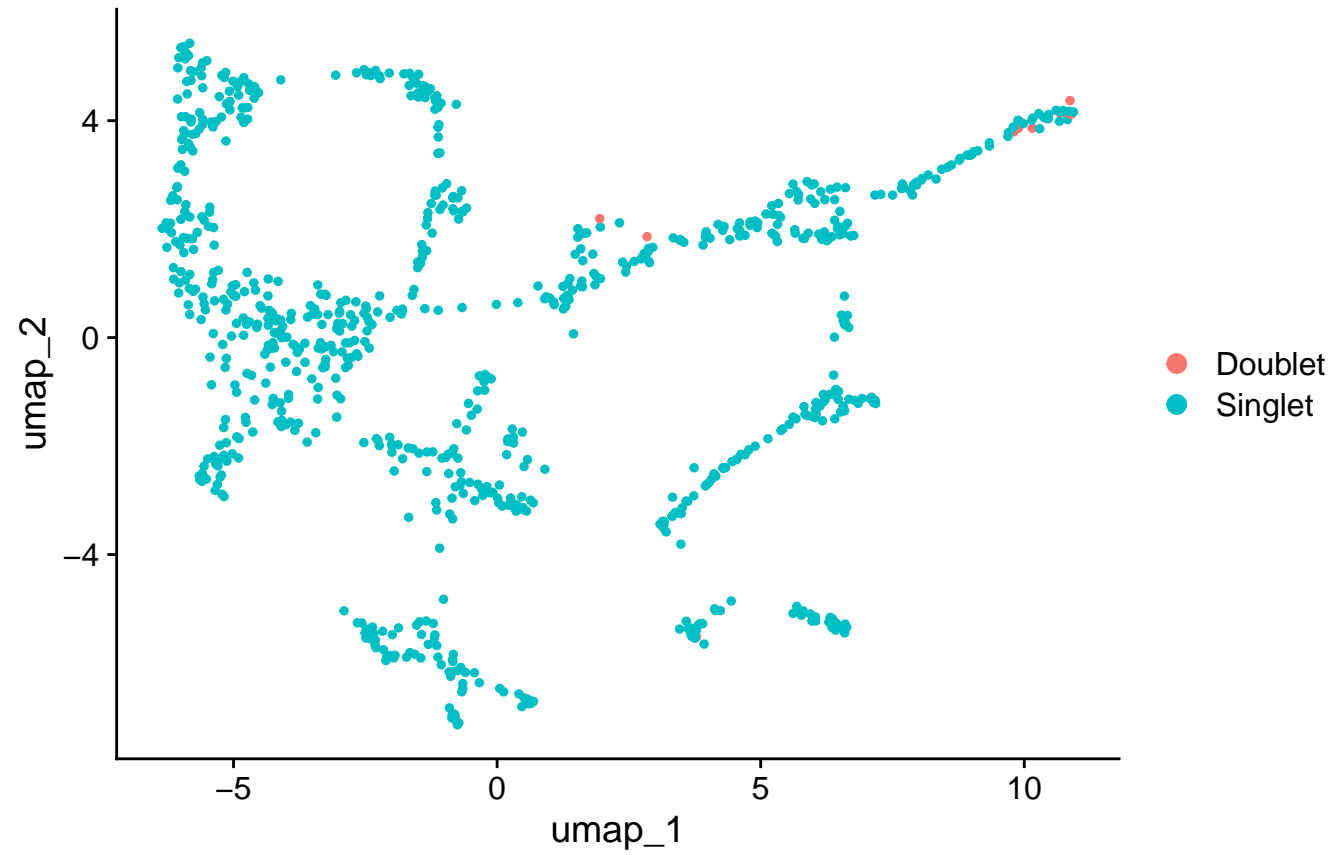


	res_vals	num_clusters	avg_sil_vals
1	0.3	8	0.300965368622129
2	1.2	13	0.269978582814319
3	0.2	6	0.256689741570076
4	0.7	12	0.247993881199659
5	0.1	4	0.246381755878222
6	0.4	10	0.238072738149021

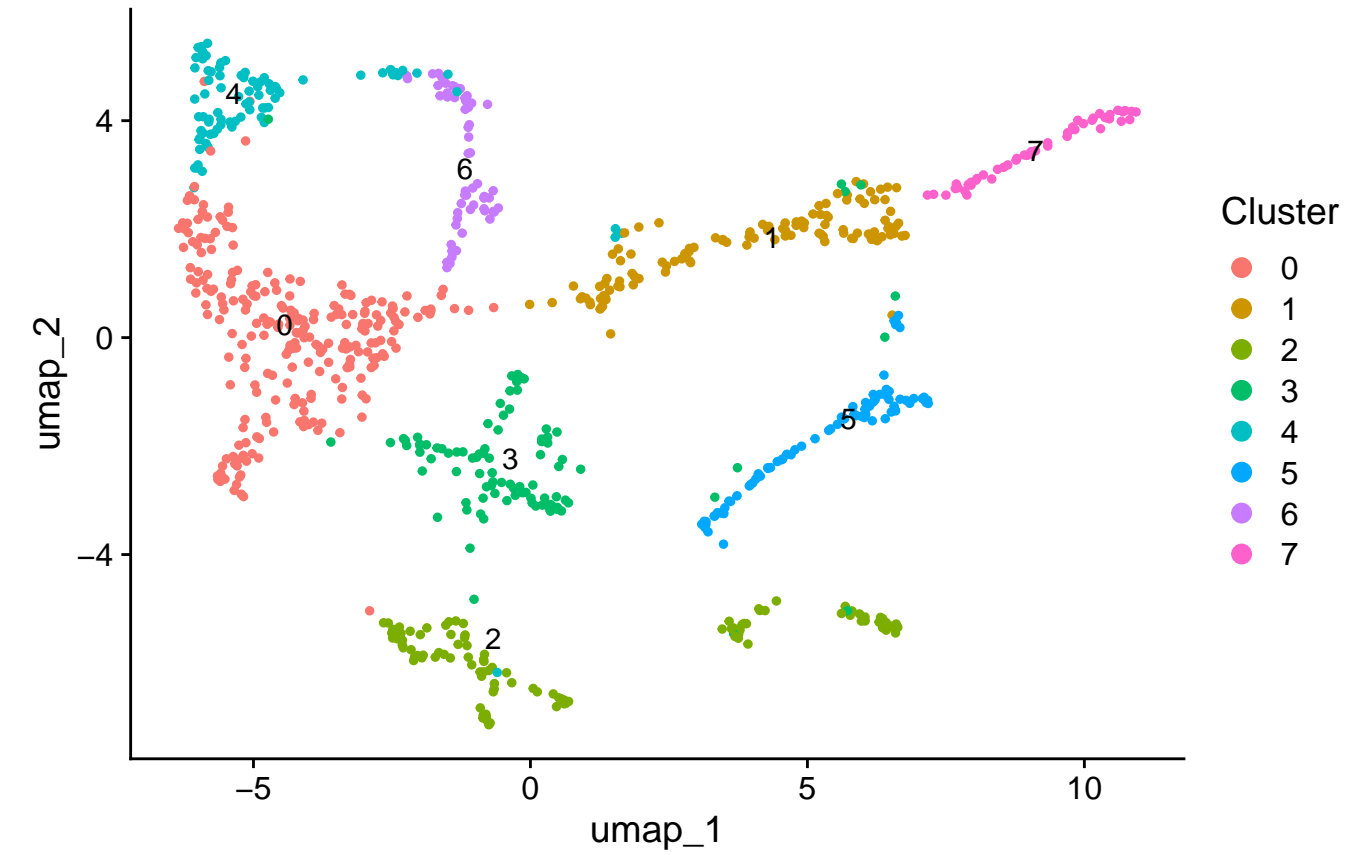


org_1A – UMAP & Doublet Removal

org_1A: Doublets Detected



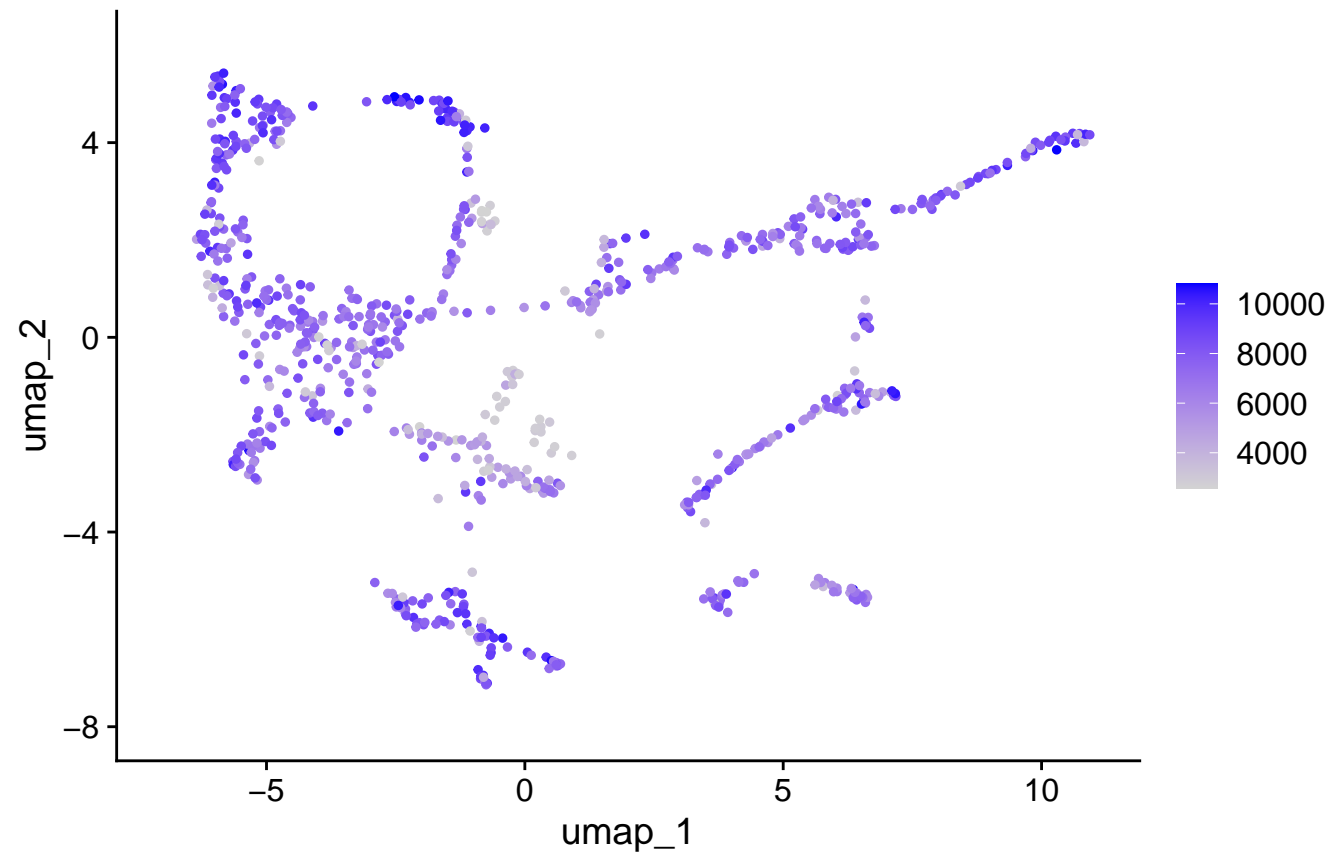
org_1A: Final UMAP



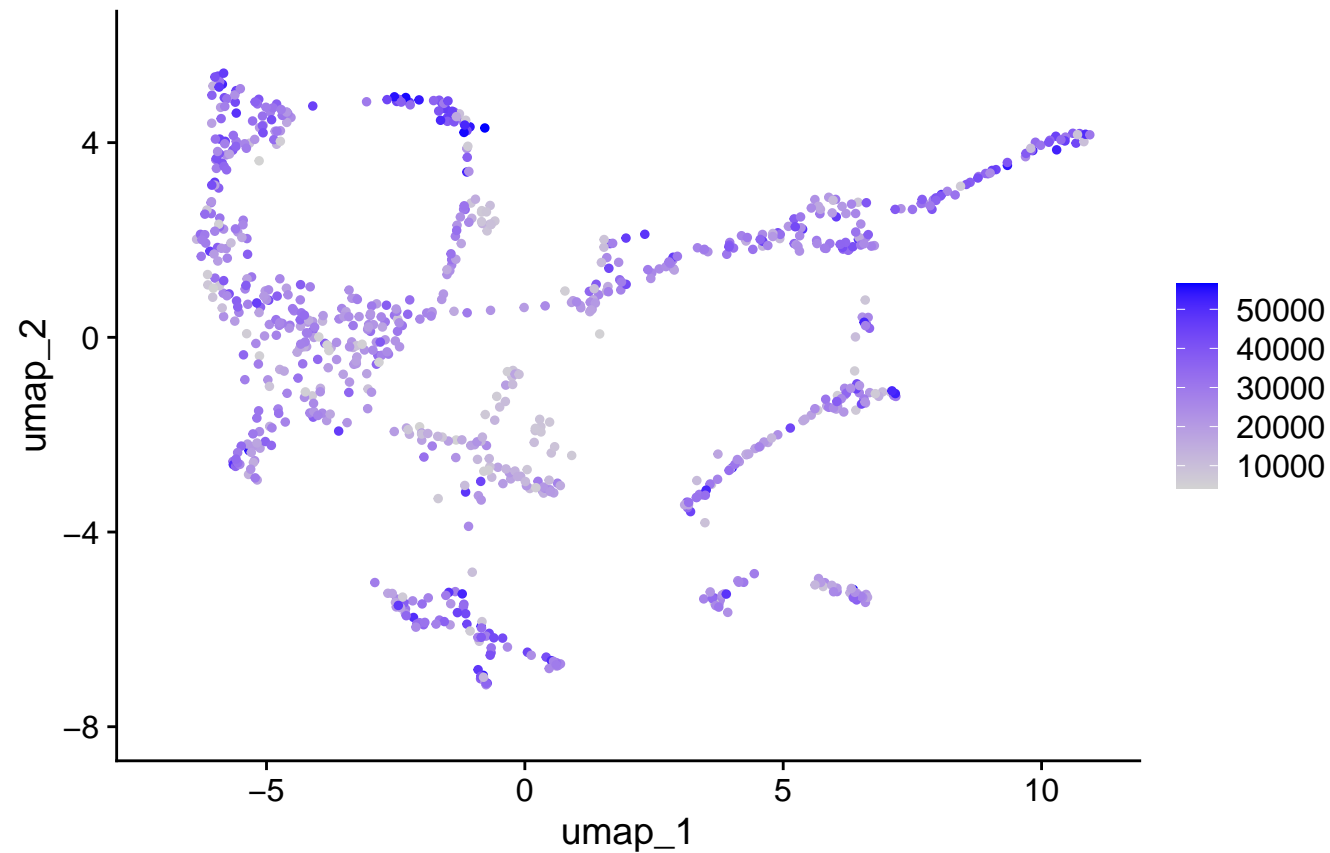
	DF.classifications	median_nCount	median_nFeature	count
1	Doublet	36964.5	8742.5	12
2	Singlet	25924.0	7355.0	835

org_1A – QC Metrics & Cell Cycle on UMAP

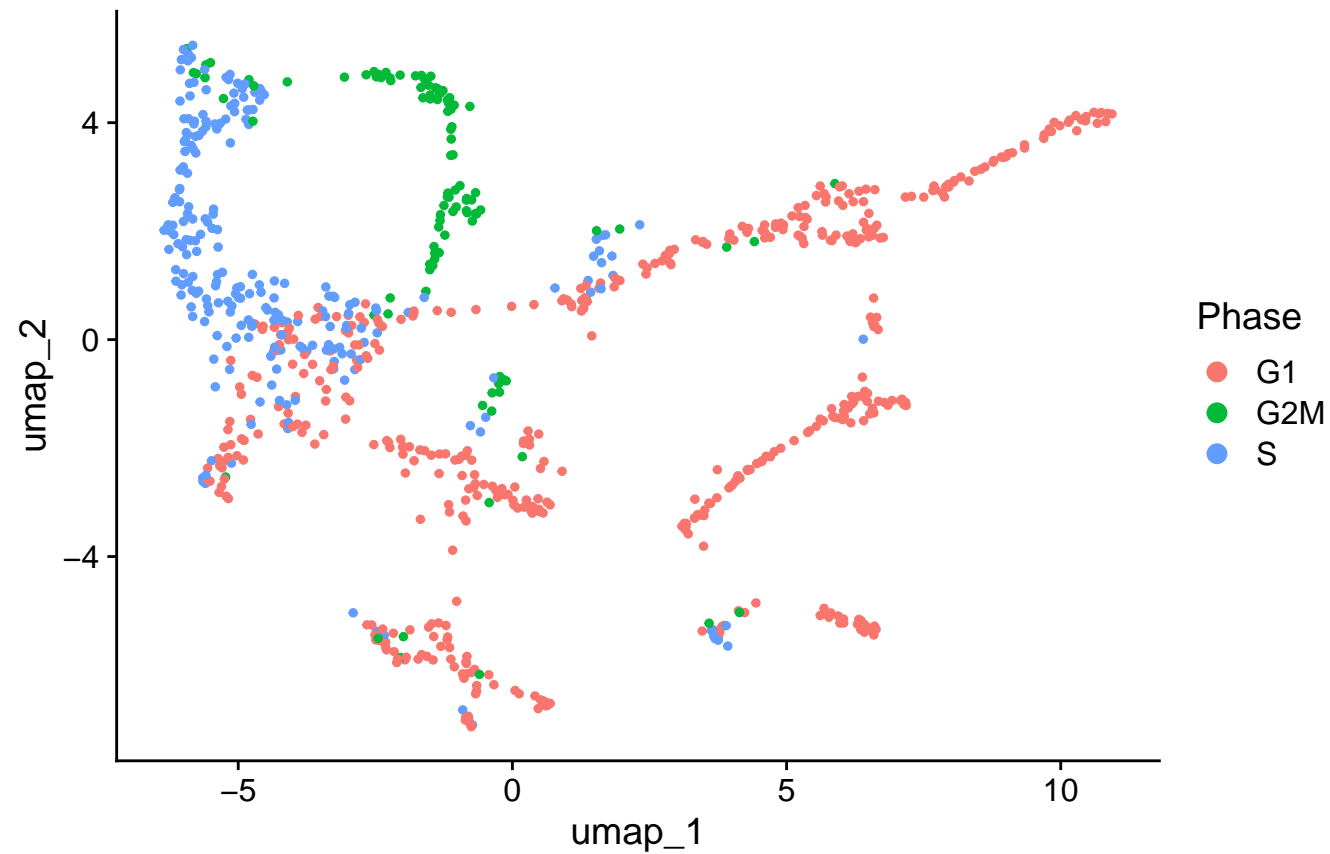
org_1A: nFeature_RNA



org_1A: nCount_RNA



org_1A: Cell Cycle Phase



org_1A: Final UMAP

