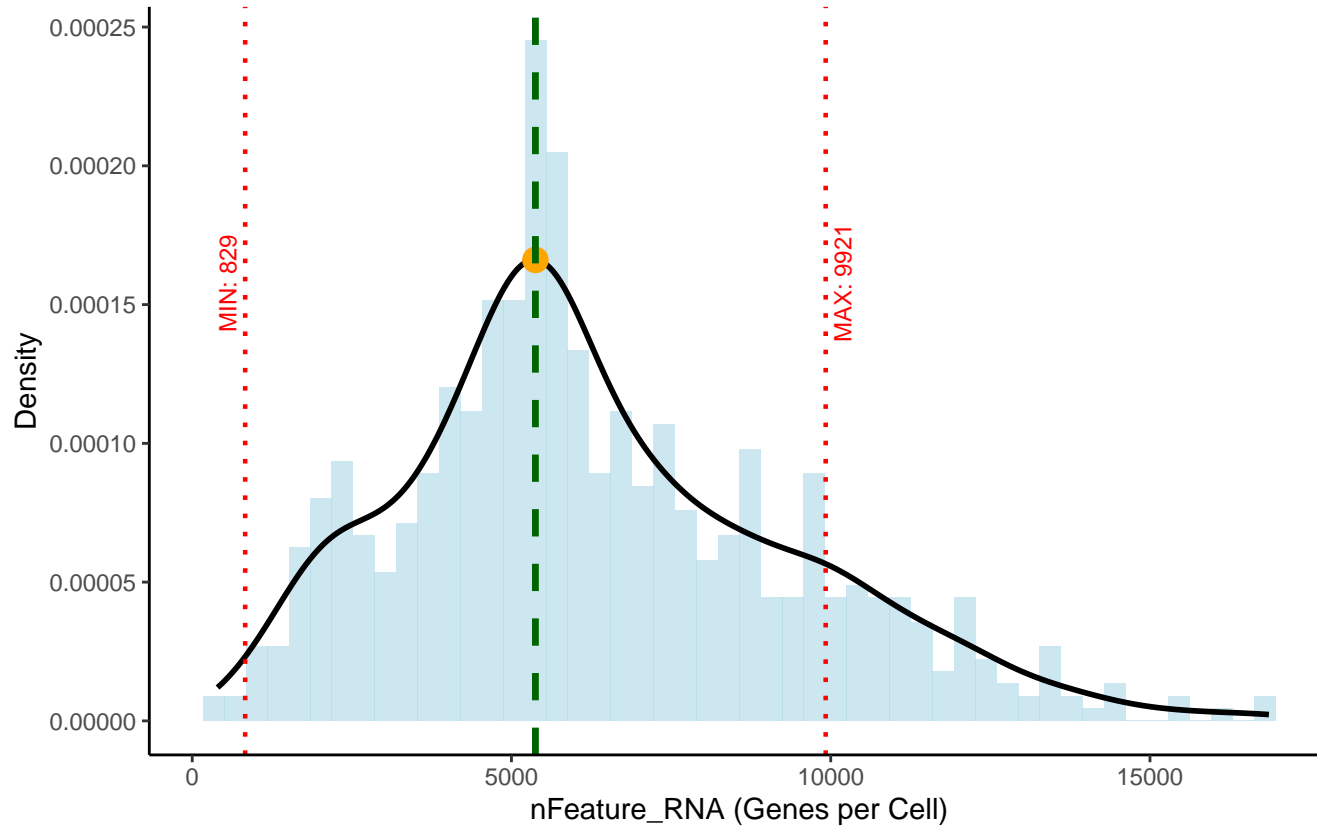


## org\_6A – Adaptive Threshold Determination

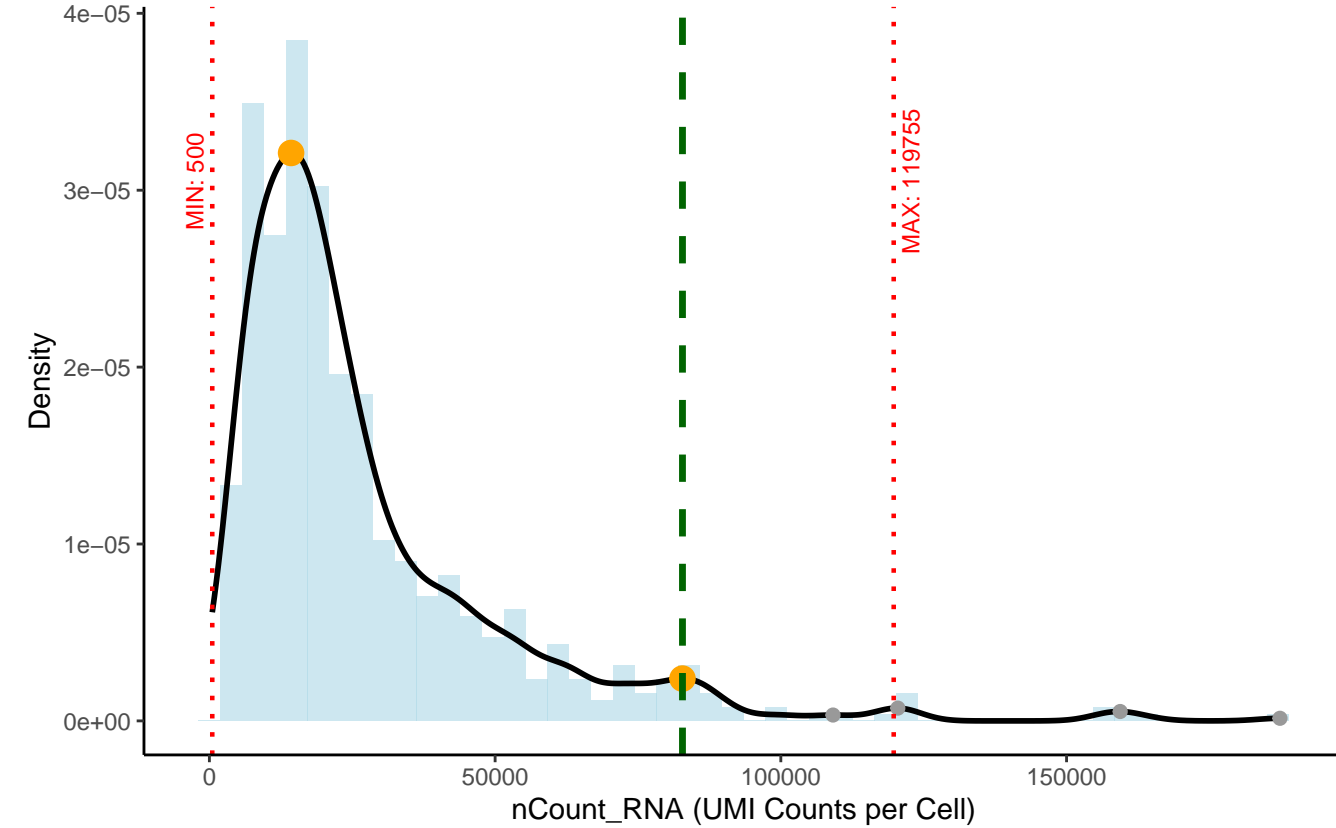
org\_6A: nFeature\_RNA (Genes per Cell) Distribution

Method: peak | Selected peak: 5374.9 | Total peaks: 1 | Top 2 peaks used



org\_6A: nCount\_RNA (UMI Counts per Cell) Distribution

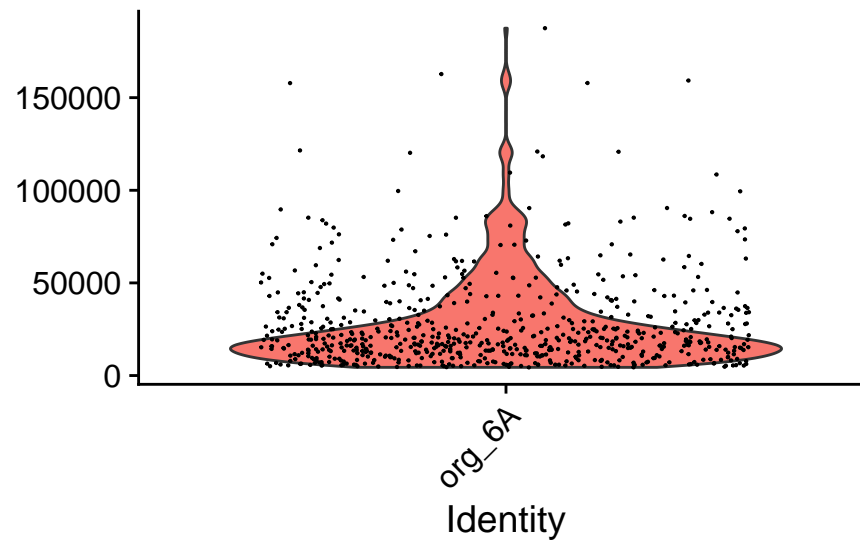
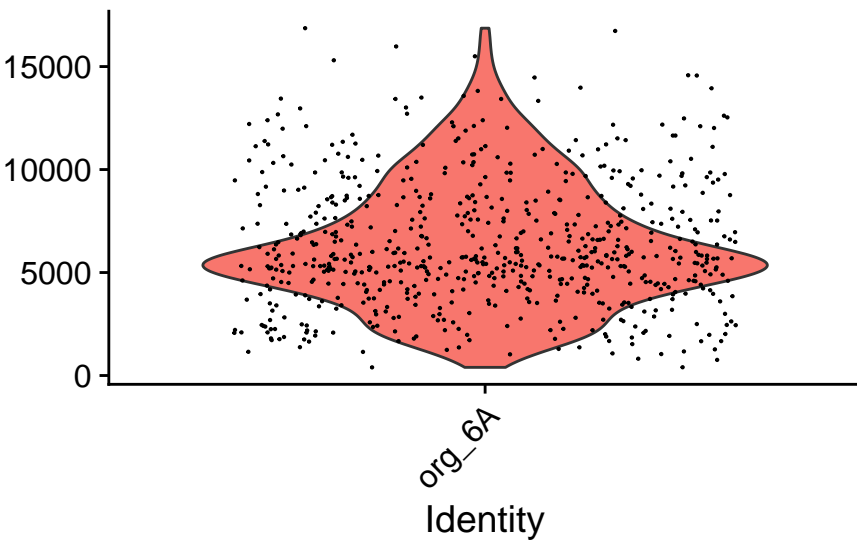
Method: peak | Selected peak: 82788.5 | Total peaks: 6 | Top 2 peaks used



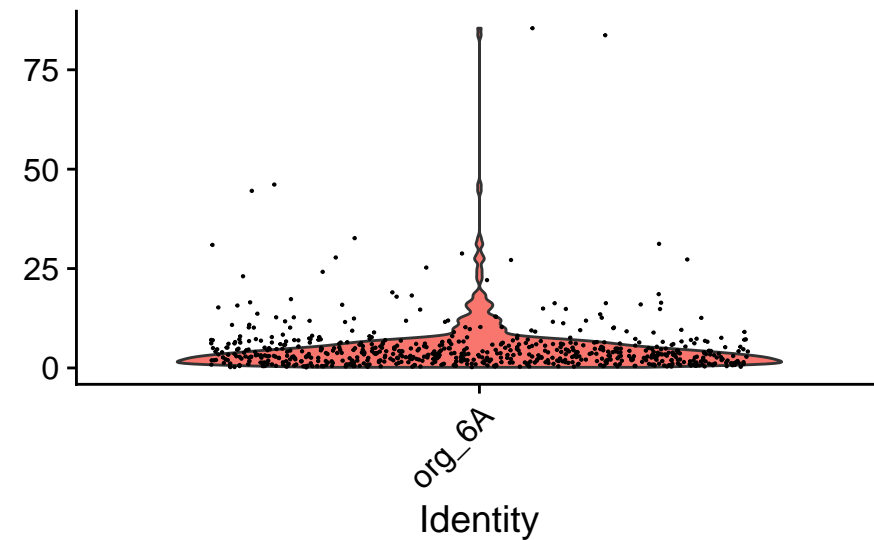
Metric	Method	Selected_Peak	Total_Peaks	Top2_Peaks	SD	MIN_Threshold	MAX_Threshold
nFeature_RNA	peak	5375	1	5375	3031	829	9921
nCount_RNA	peak	82789	6	14297, 82789	24644	500	119755

org\_6A – Filtering Summary  
org\_6A: Counts Before Filtering

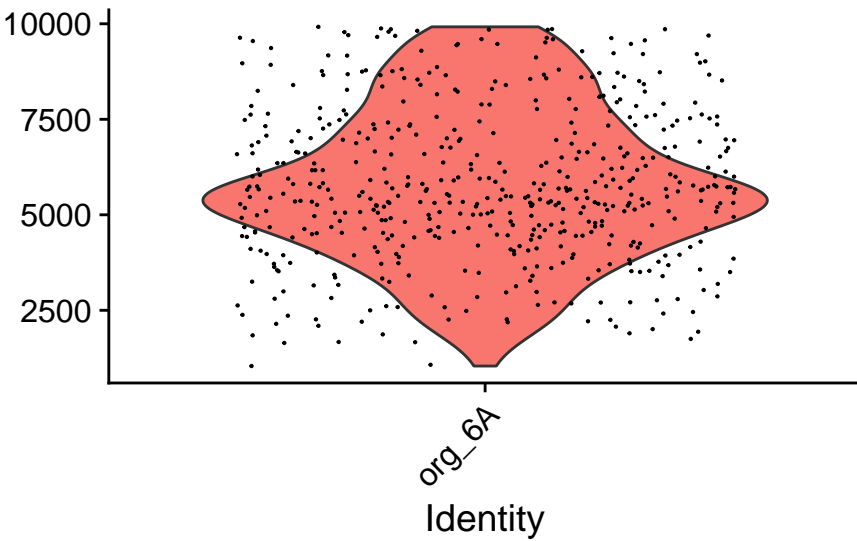
org\_6A: Genes Before Filtering



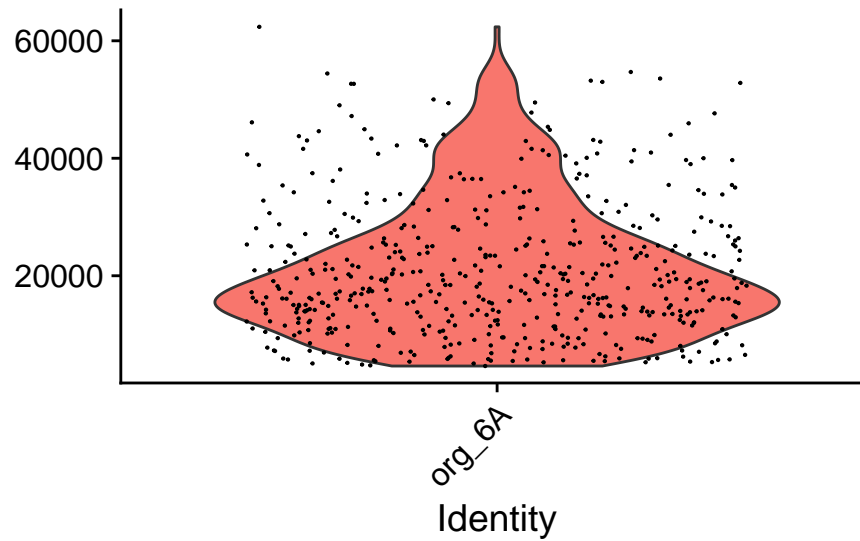
org\_6A: MT% Before Filtering



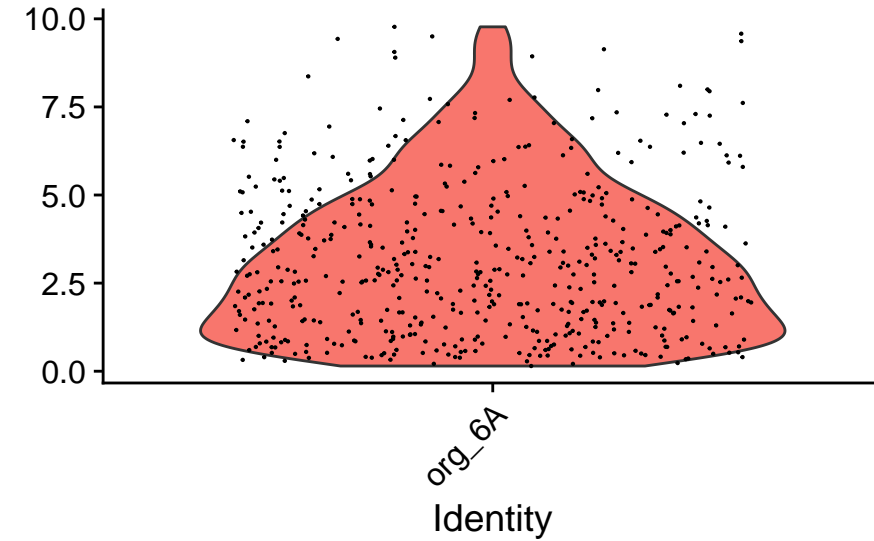
org\_6A: Genes After Filtering



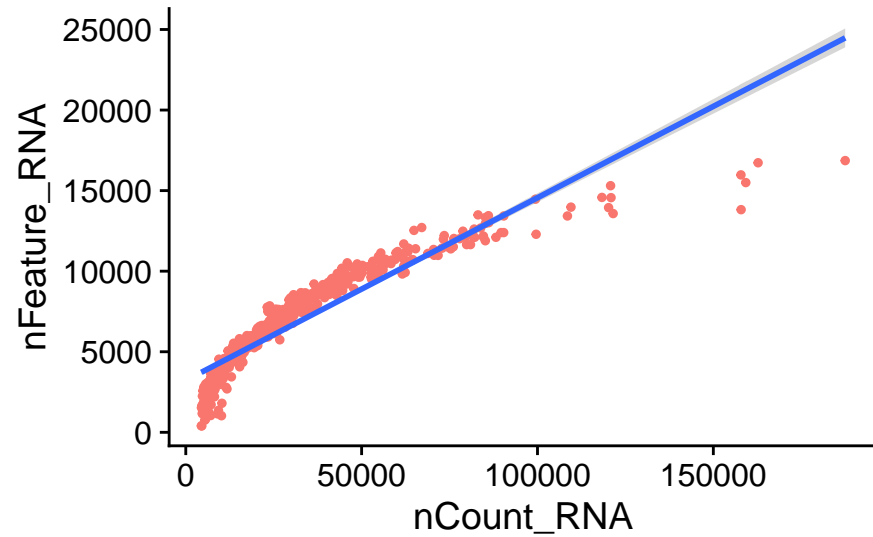
org\_6A: Counts After Filtering



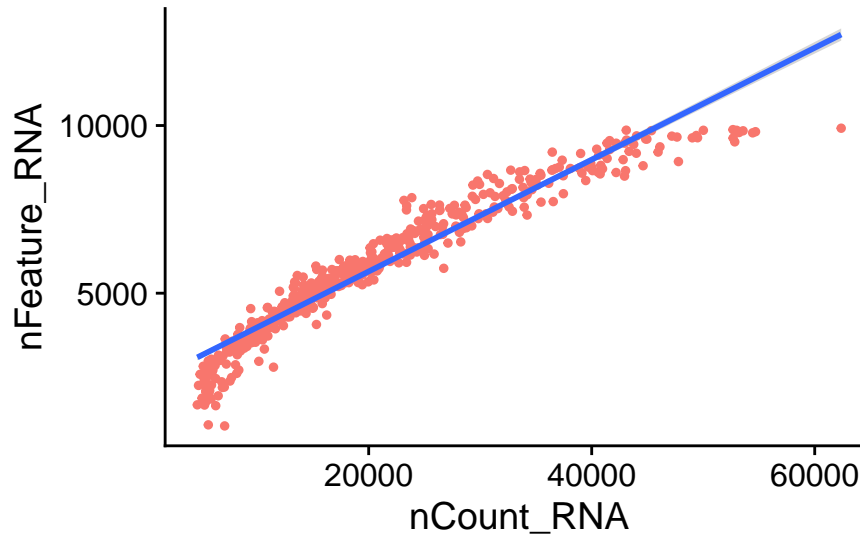
org\_6A: MT% After Filtering



org\_6A: Before Filtering



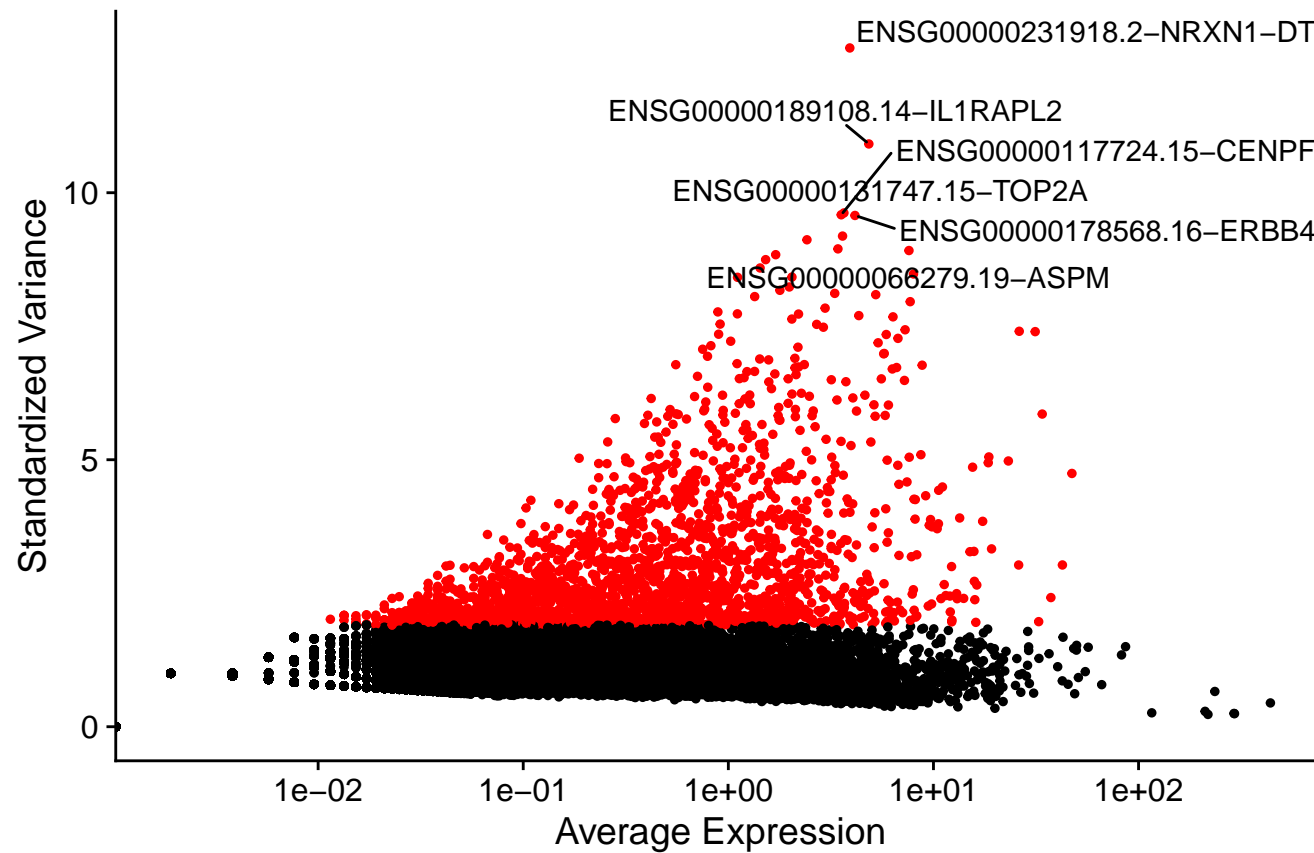
org\_6A: After Filtering



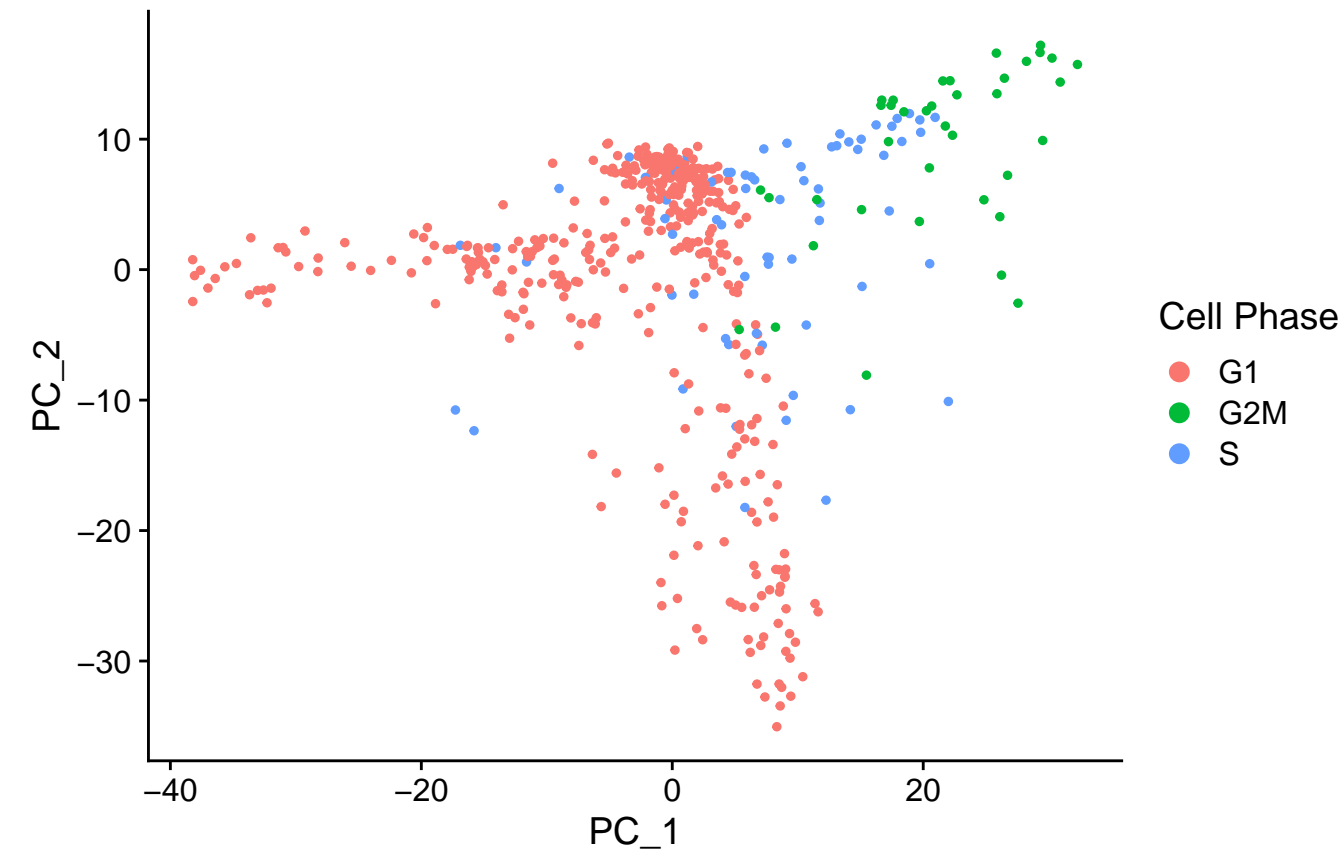
	Metric	Before	After
1	Cells	668.000000	523.000000
2	Genes	37861.000000	37861.000000
3	Median nCount	19413.000000	18423.000000
4	Median nFeature	5740.000000	5625.000000
5	Median MT%	3.262026	2.752873

## org\_6A – Variable Features & Cell Cycle

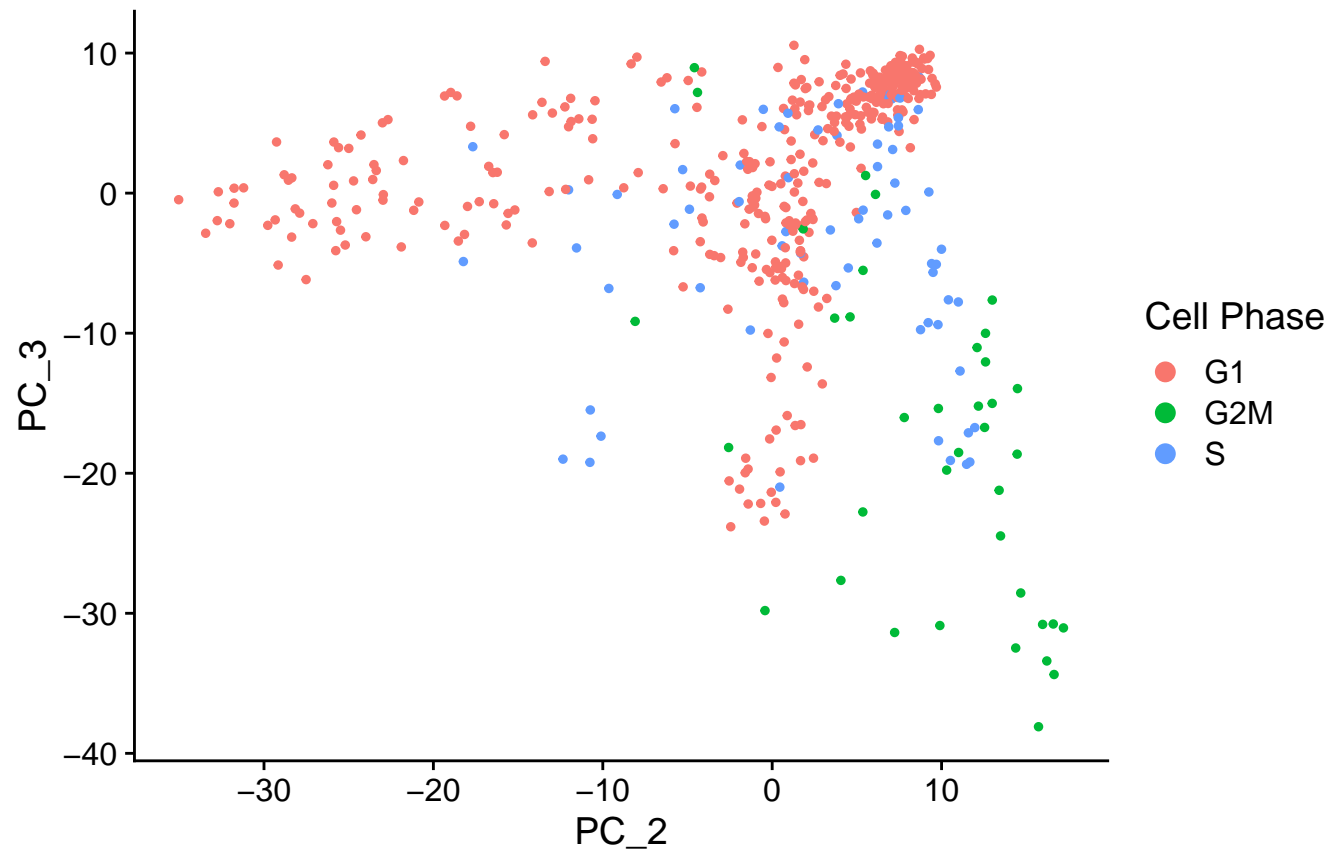
### org\_6A: Top 2000 Variable Genes



### org\_6A: Cell Cycle on PC1 & PC2



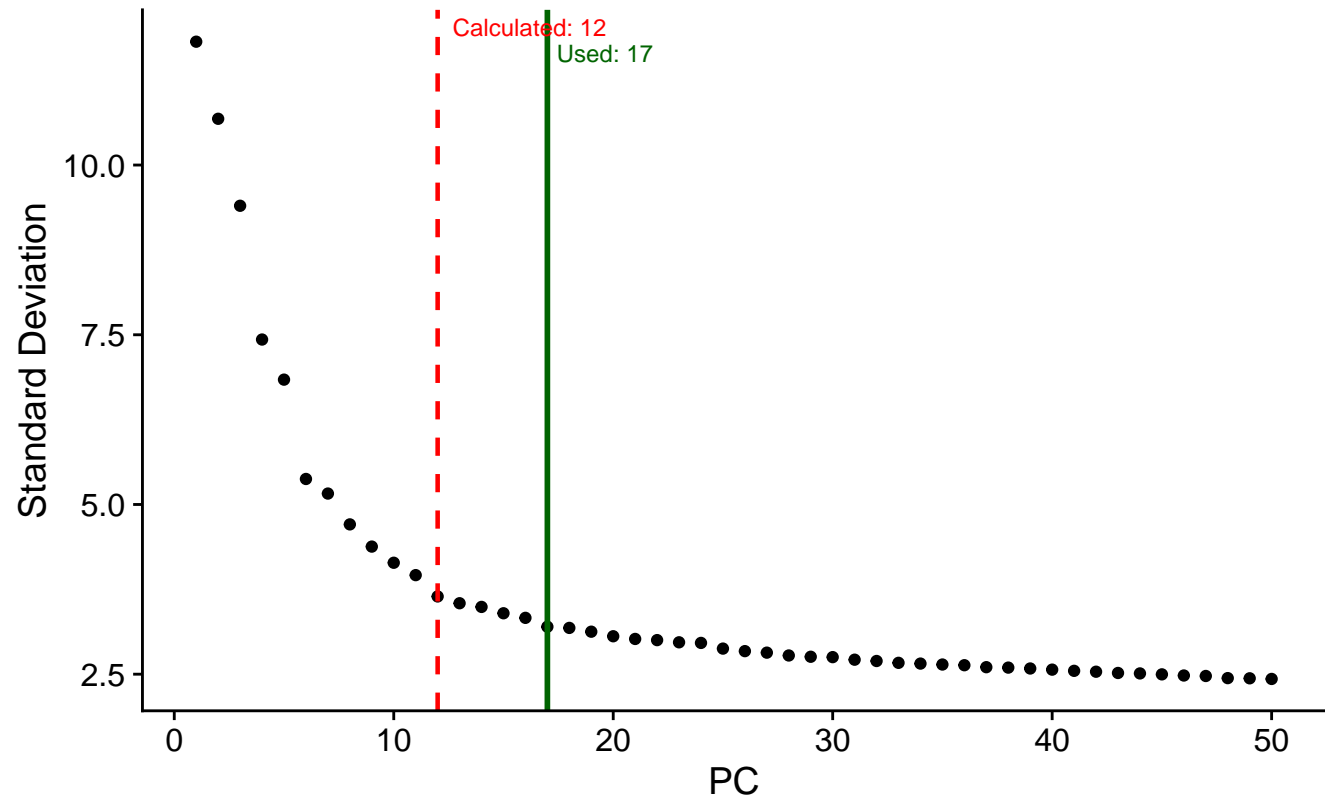
### org\_6A: Cell Cycle on PC2 & PC3



# org\_6A – PCA Selection & Silhouette Analysis

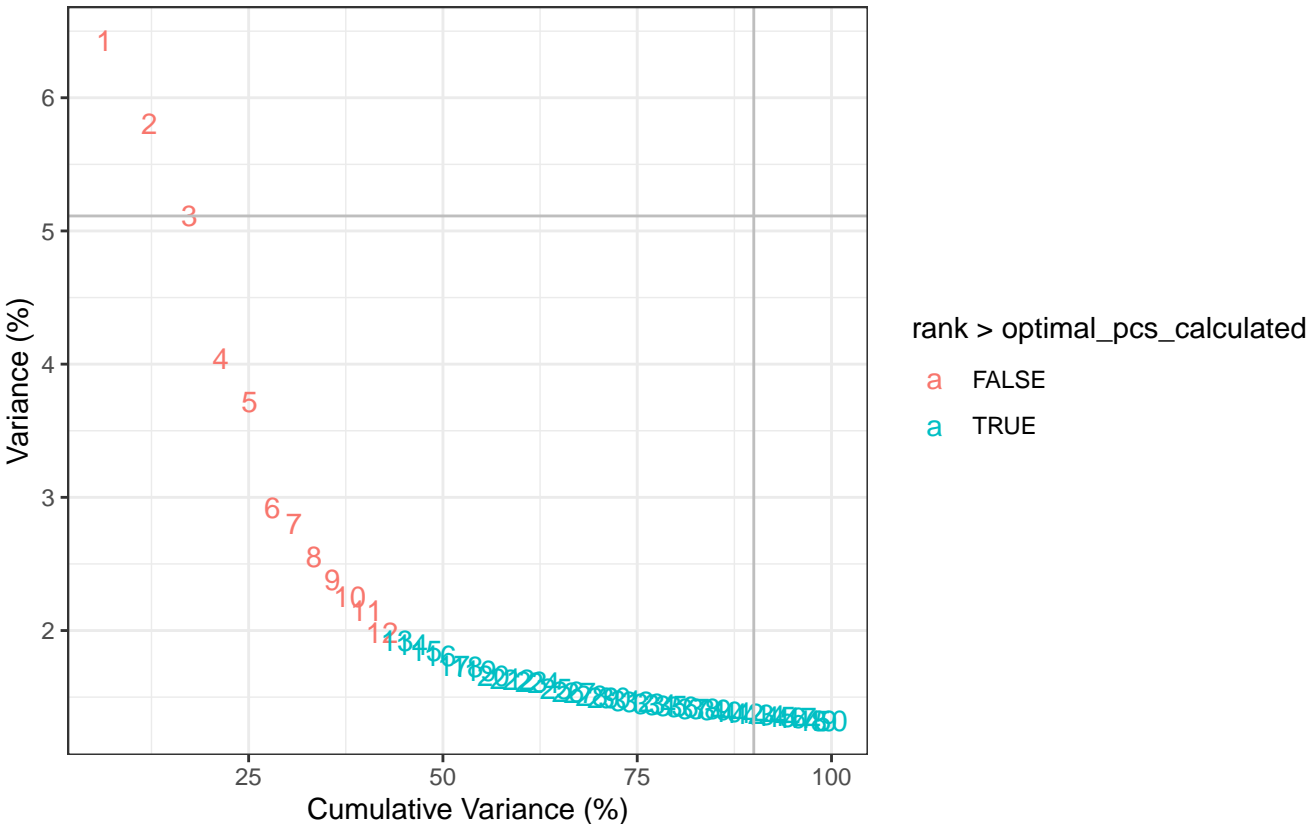
## org\_6A: Elbow Plot

Calculated: 12 PCs | Used: 17 PCs (+5)

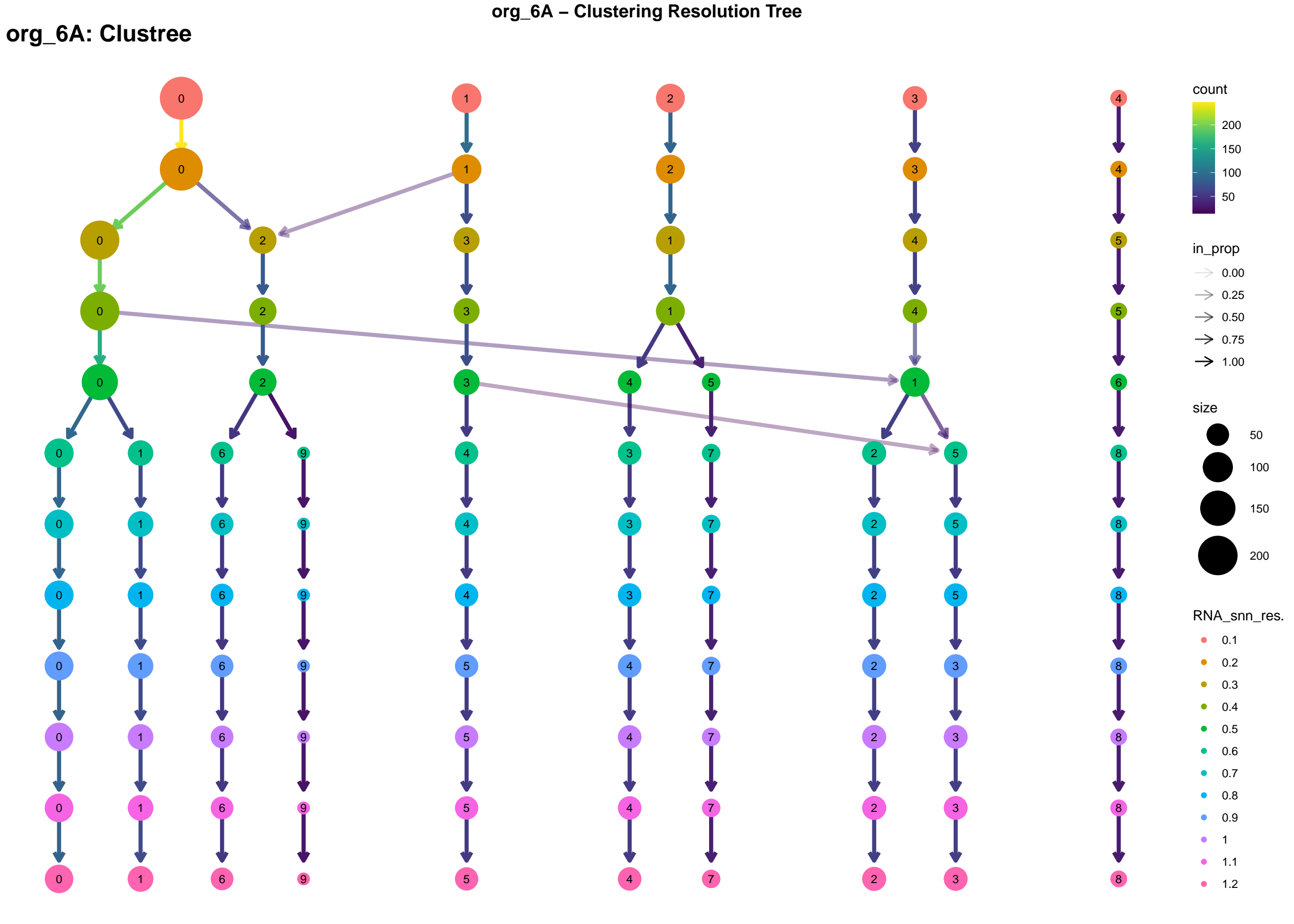


## org\_6A: Quantitative PC Selection

Calculated: 12 PCs | Used: 17 PCs (+5)

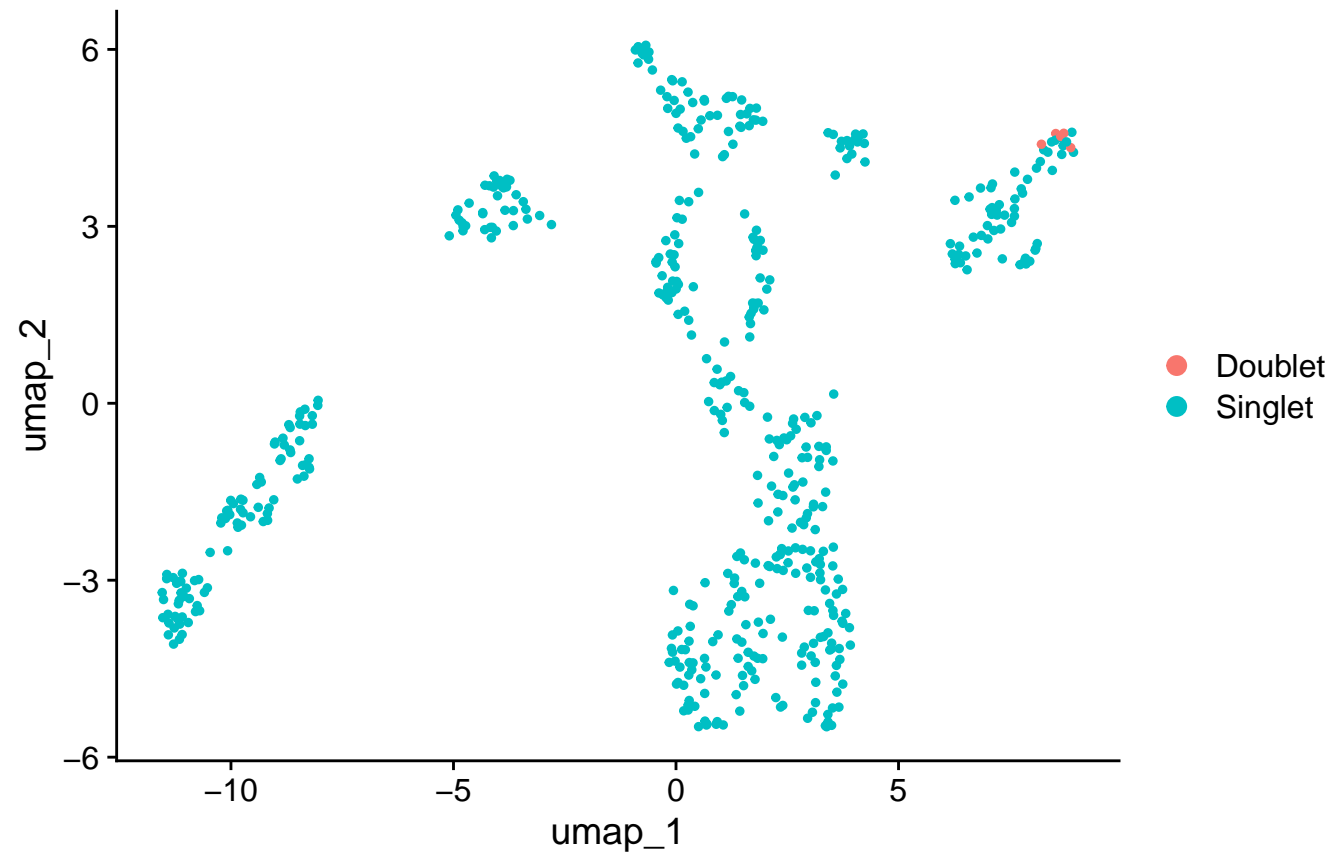


	res_vals	num_clusters	avg_sil_vals
1	0.1	5	0.397534255240846
2	0.3	6	0.359222476002996
3	0.5	7	0.312007422553343
4	0.7	10	0.206836834107449

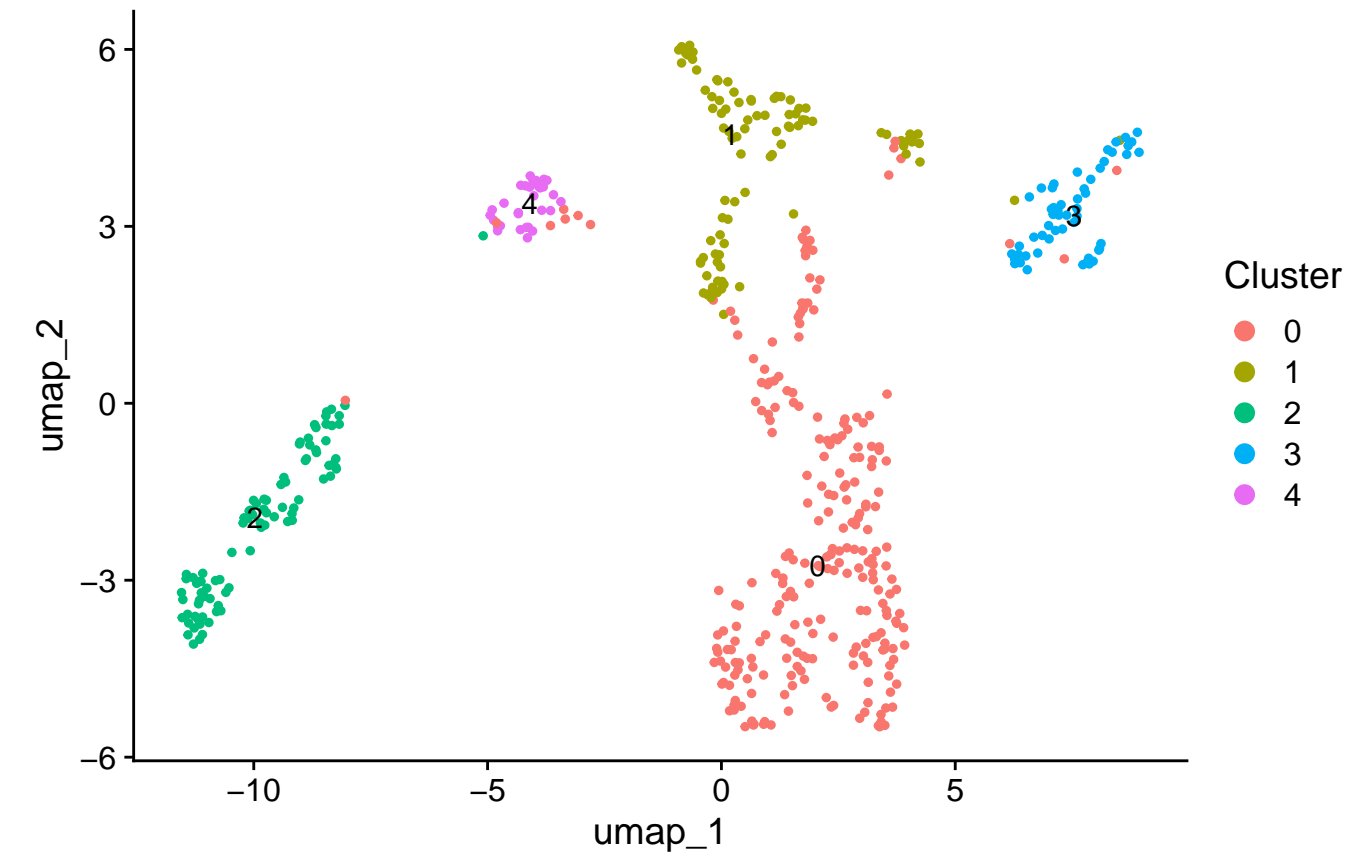


# org\_6A – UMAP & Doublet Removal

org\_6A: Doublets Detected



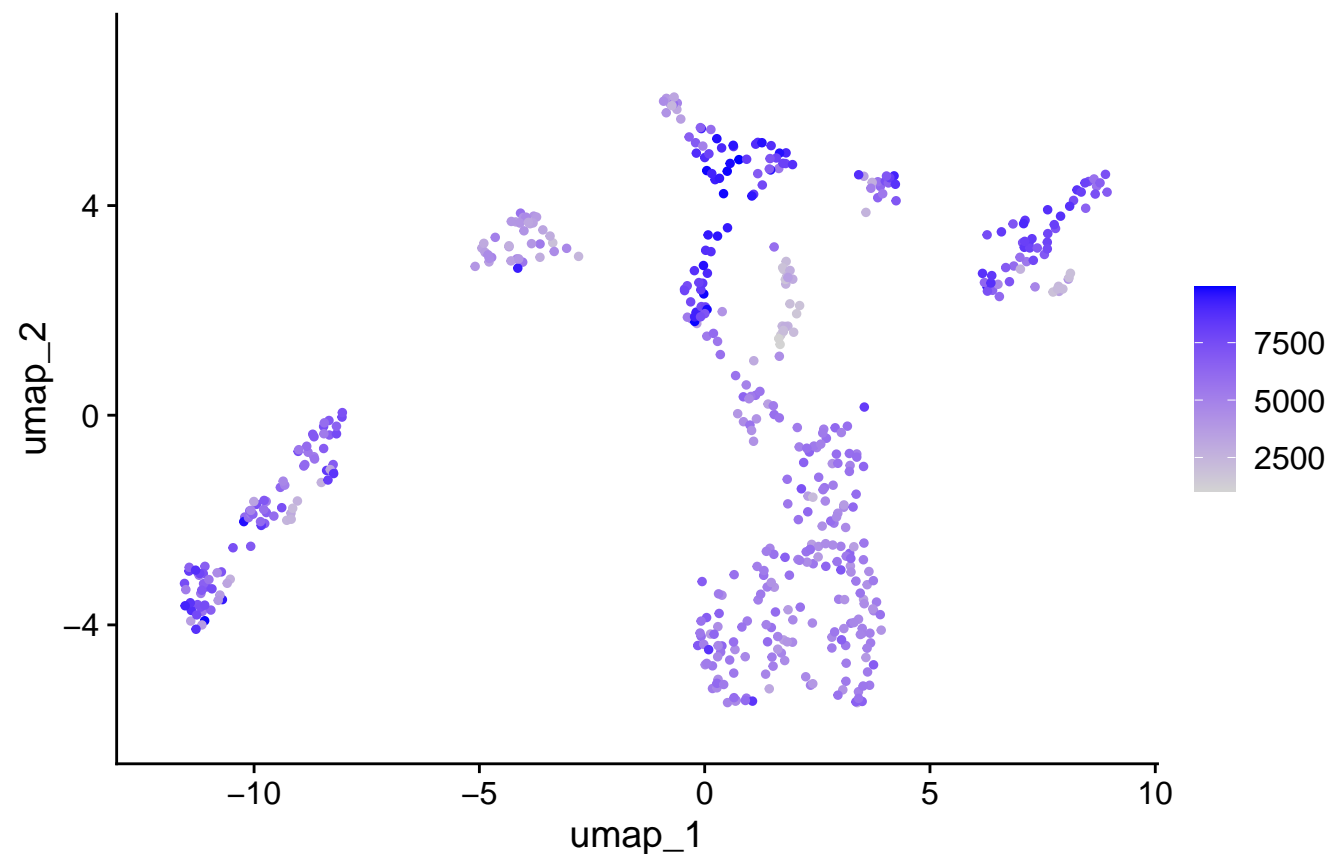
org\_6A: Final UMAP



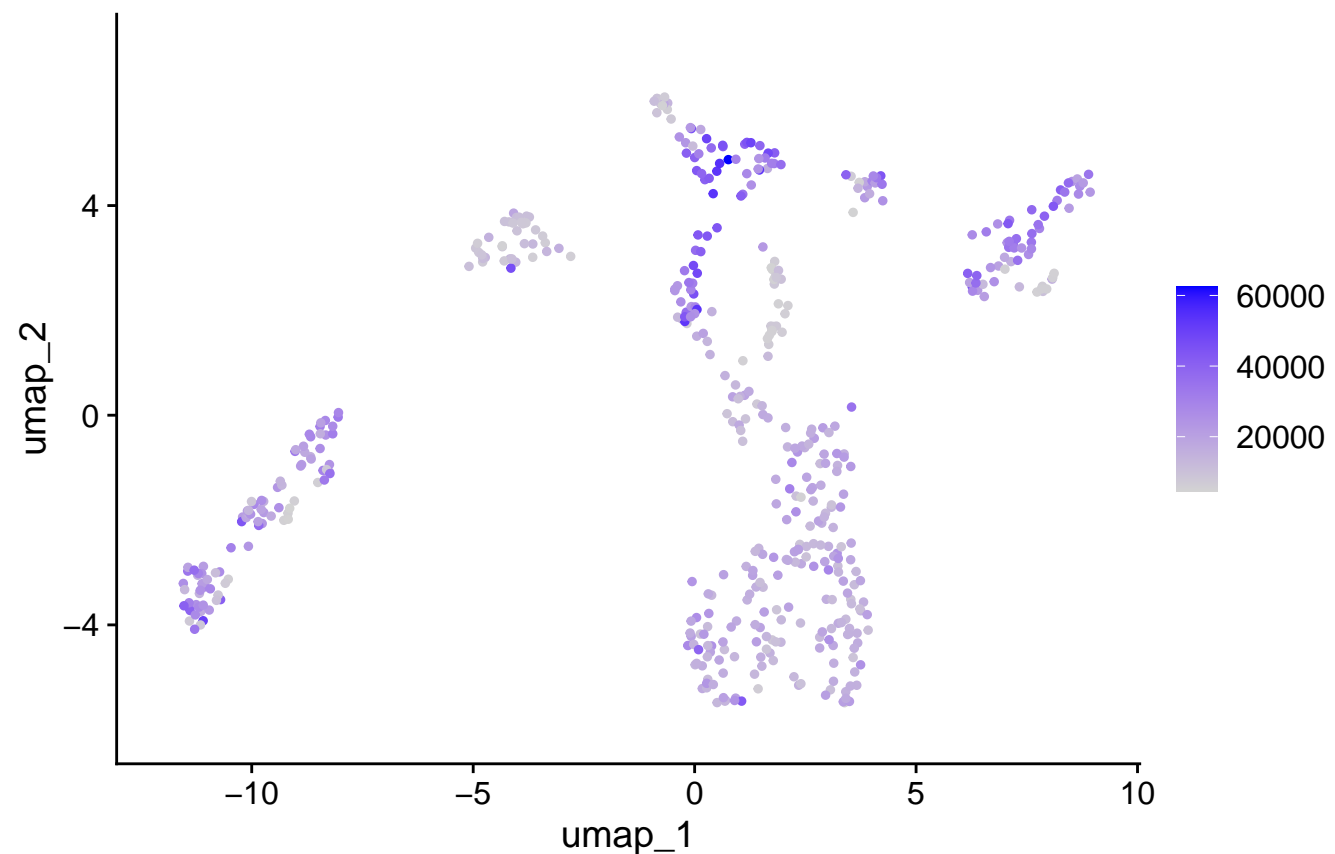
	DF.classifications	median_nCount	median_nFeature	count
1	Doublet	45551.5	9397.5	6
2	Singlet	18221.0	5577.0	517

# org\_6A – QC Metrics & Cell Cycle on UMAP

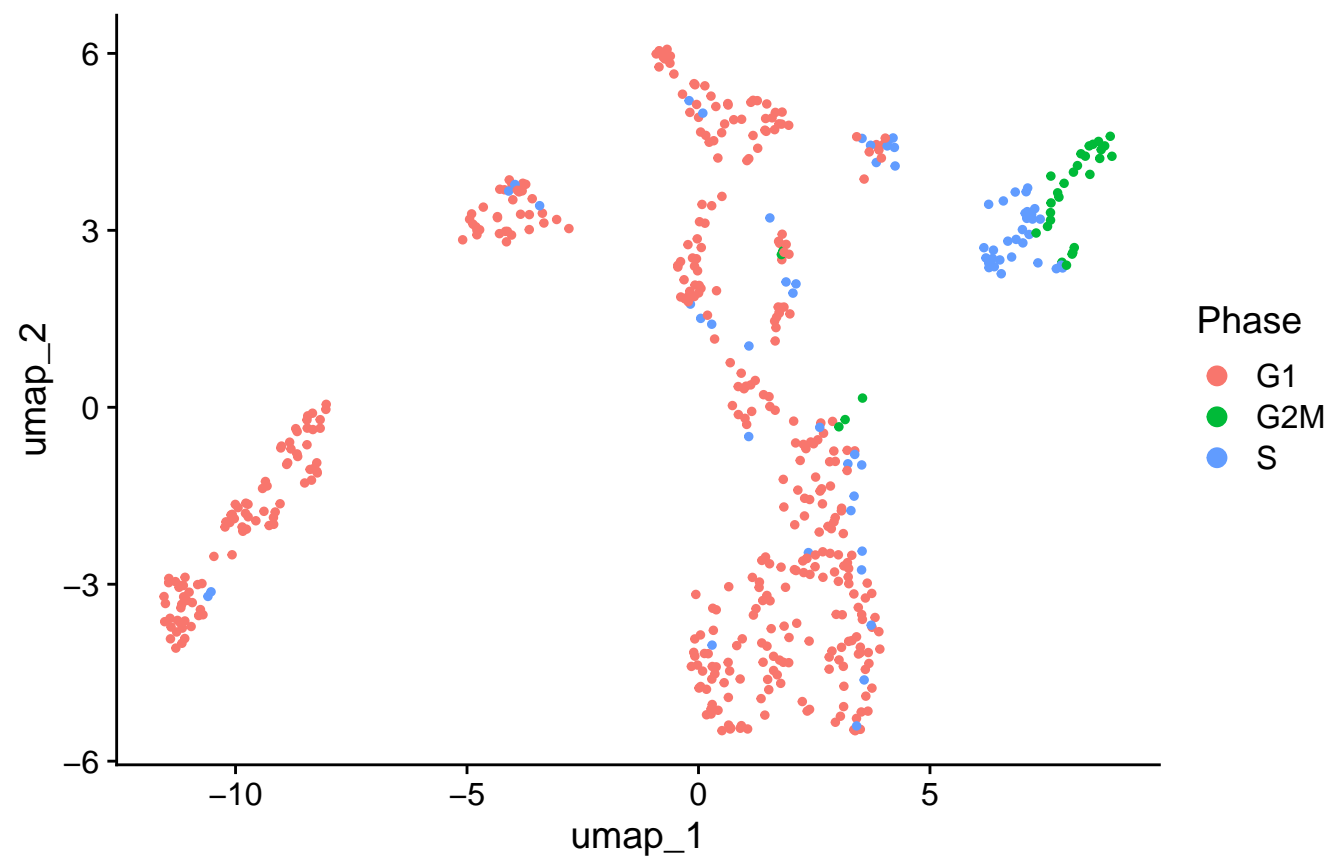
## org\_6A: nFeature\_RNA



## org\_6A: nCount\_RNA



## org\_6A: Cell Cycle Phase



## org\_6A: Final UMAP

