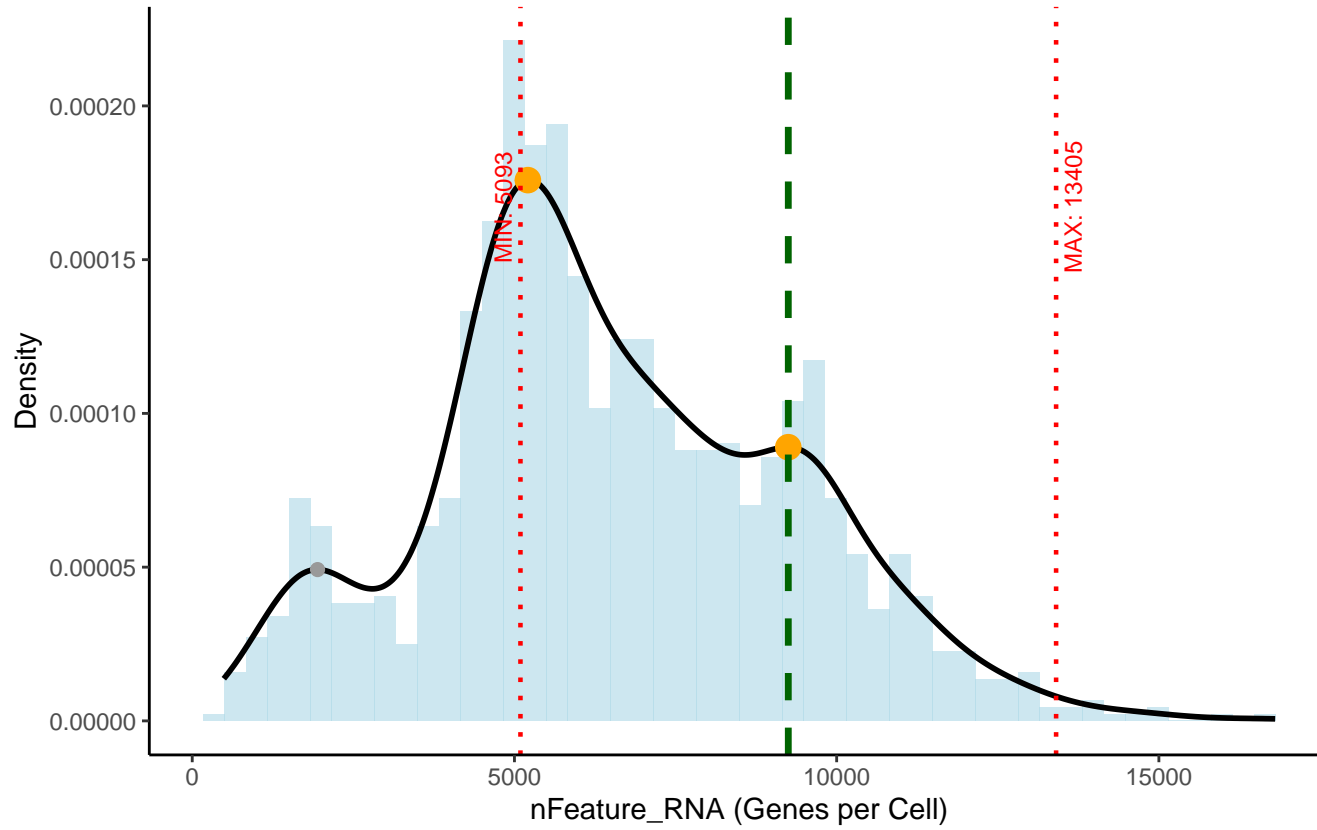


## org\_6B – Adaptive Threshold Determination

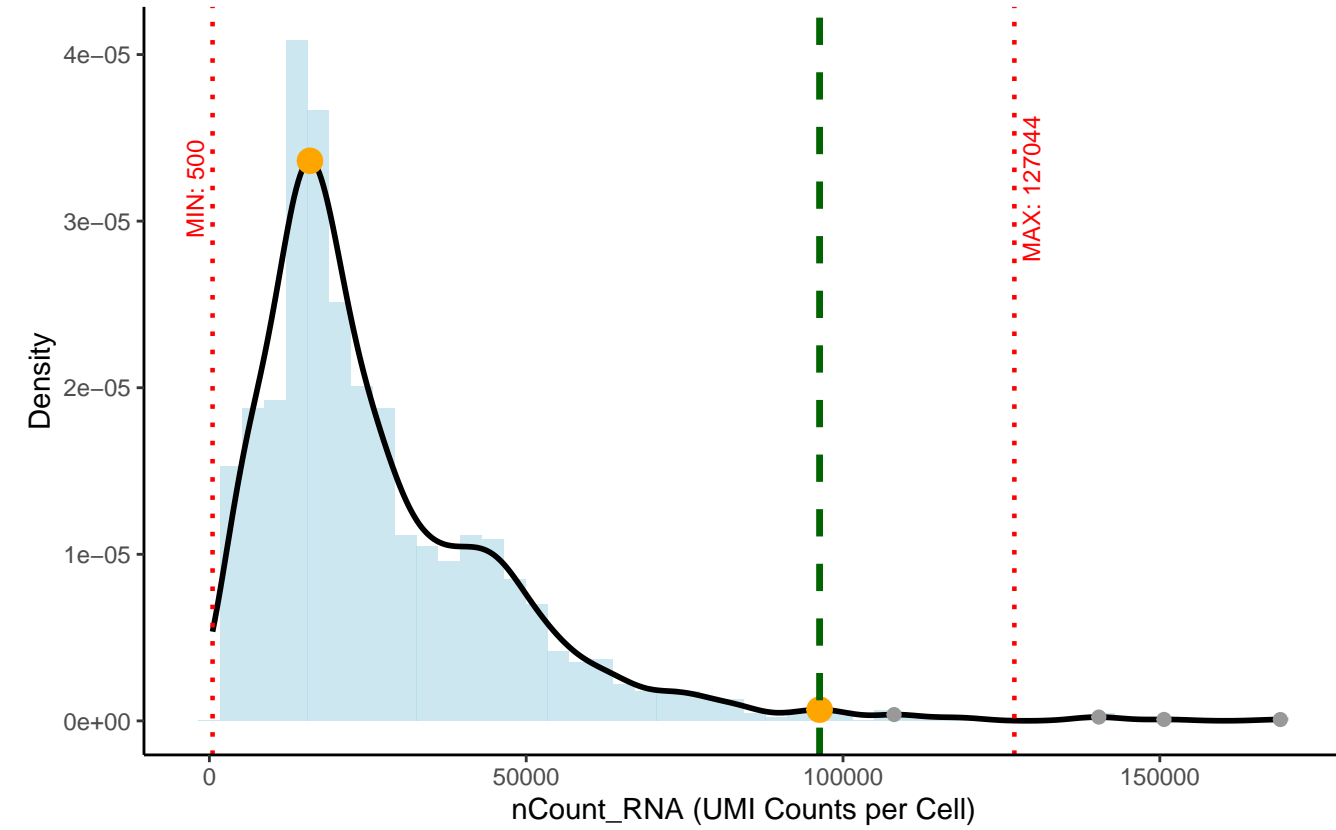
org\_6B: nFeature\_RNA (Genes per Cell) Distribution

Method: peak | Selected peak: 9249.2 | Total peaks: 3 | Top 2 peaks used



org\_6B: nCount\_RNA (UMI Counts per Cell) Distribution

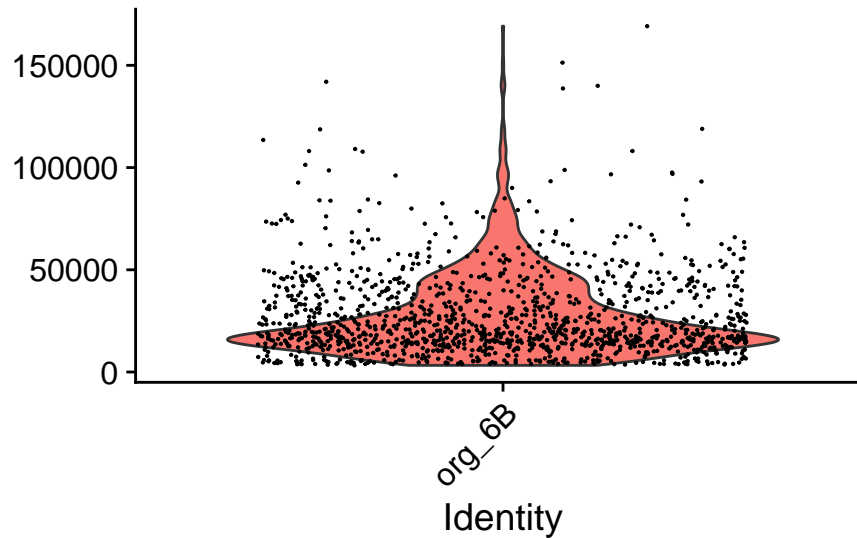
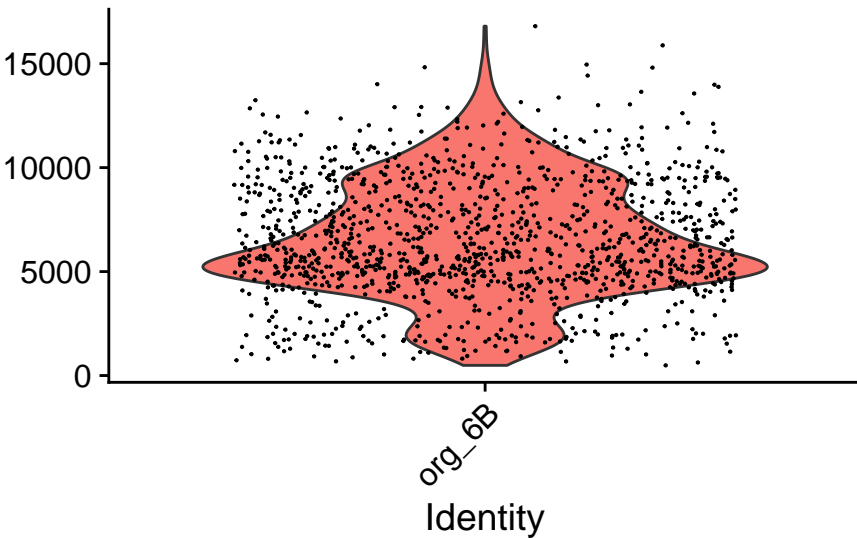
Method: peak | Selected peak: 96306.6 | Total peaks: 6 | Top 2 peaks used



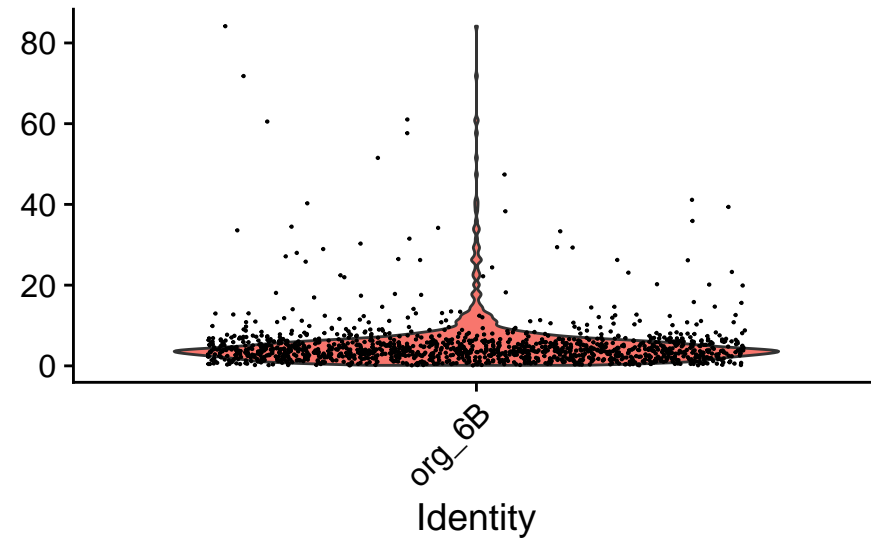
Metric	Method	Selected_Peak	Total_Peaks	Top2_Peaks	SD	MIN_Threshold	MAX_Threshold
nFeature_RNA	peak	9249	3	5208, 9249	2771	5093	13405
nCount_RNA	peak	96307	6	15873, 96307	20492	500	127044

org\_6B – Filtering Summary  
org\_6B: Counts Before Filtering

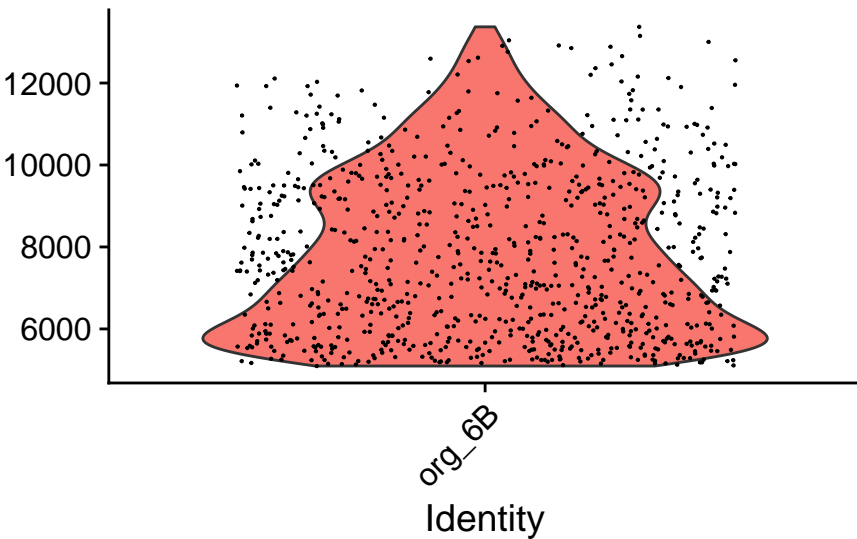
org\_6B: Genes Before Filtering



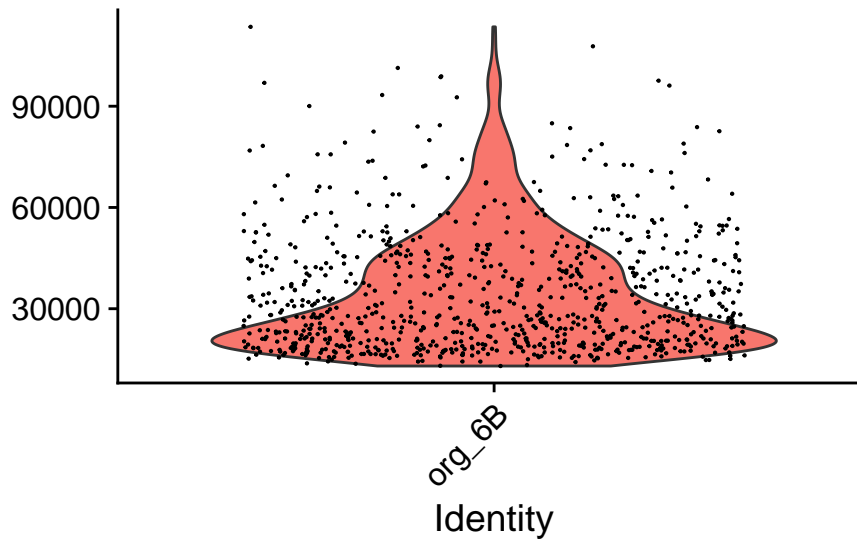
org\_6B: MT% Before Filtering



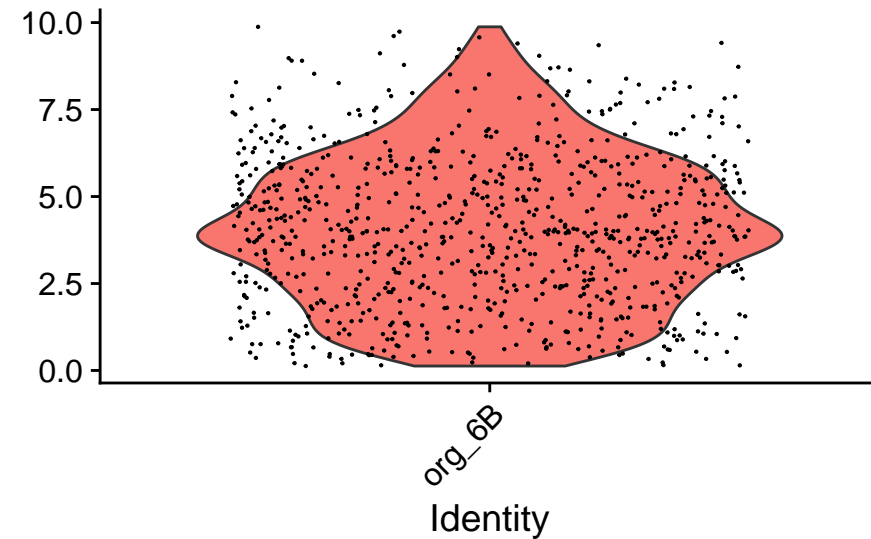
org\_6B: Genes After Filtering



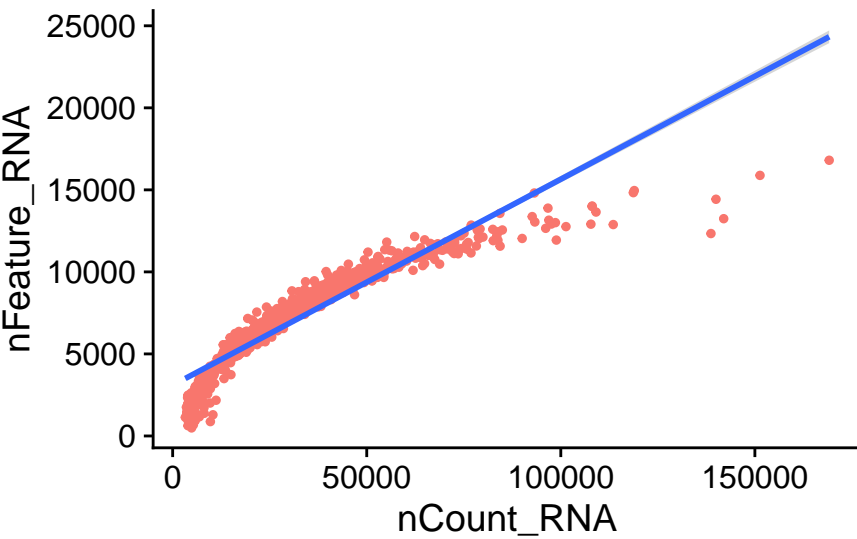
org\_6B: Counts After Filtering



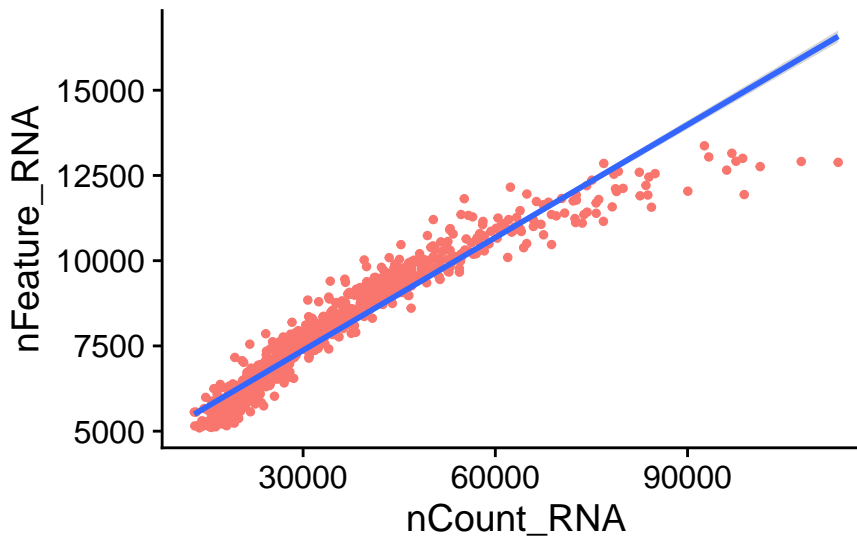
org\_6B: MT% After Filtering



org\_6B: Before Filtering



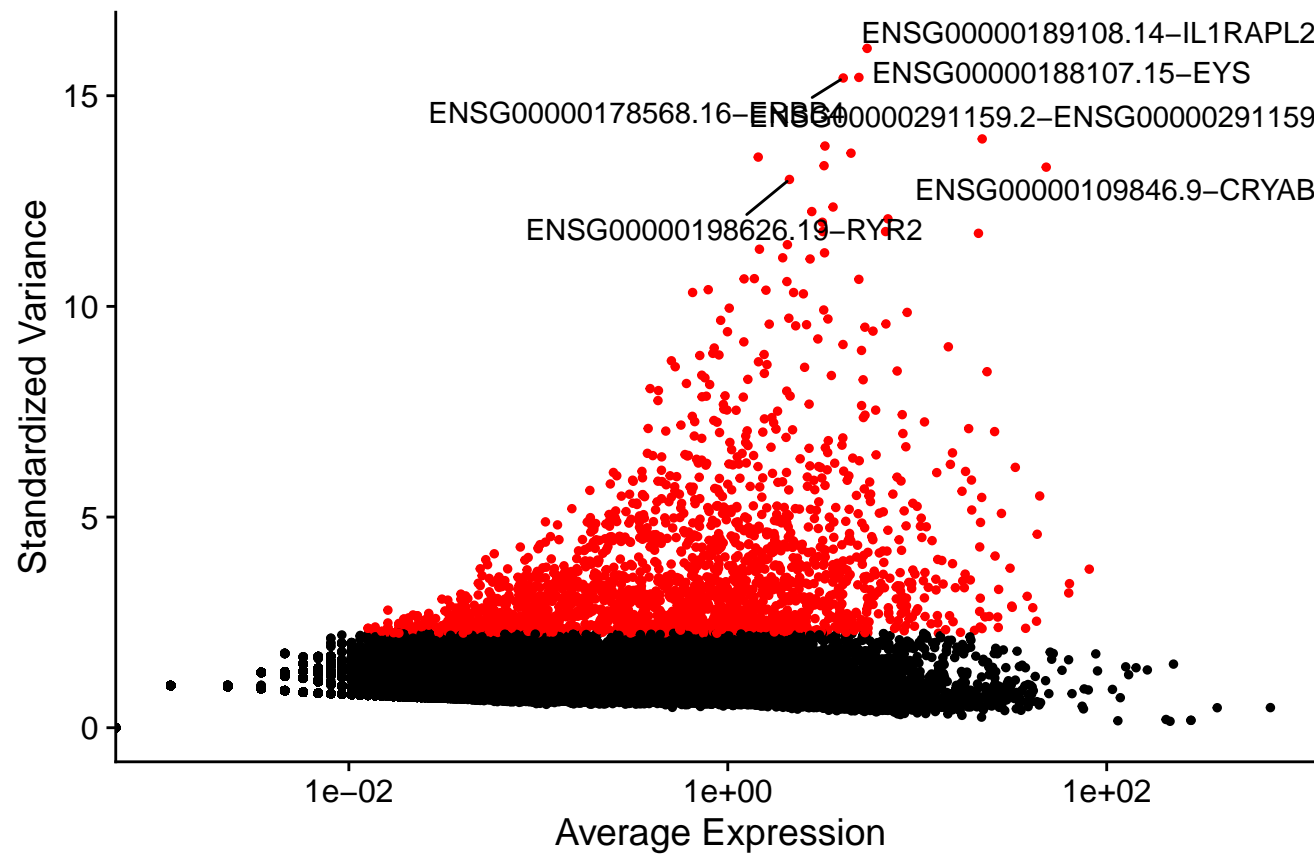
org\_6B: After Filtering



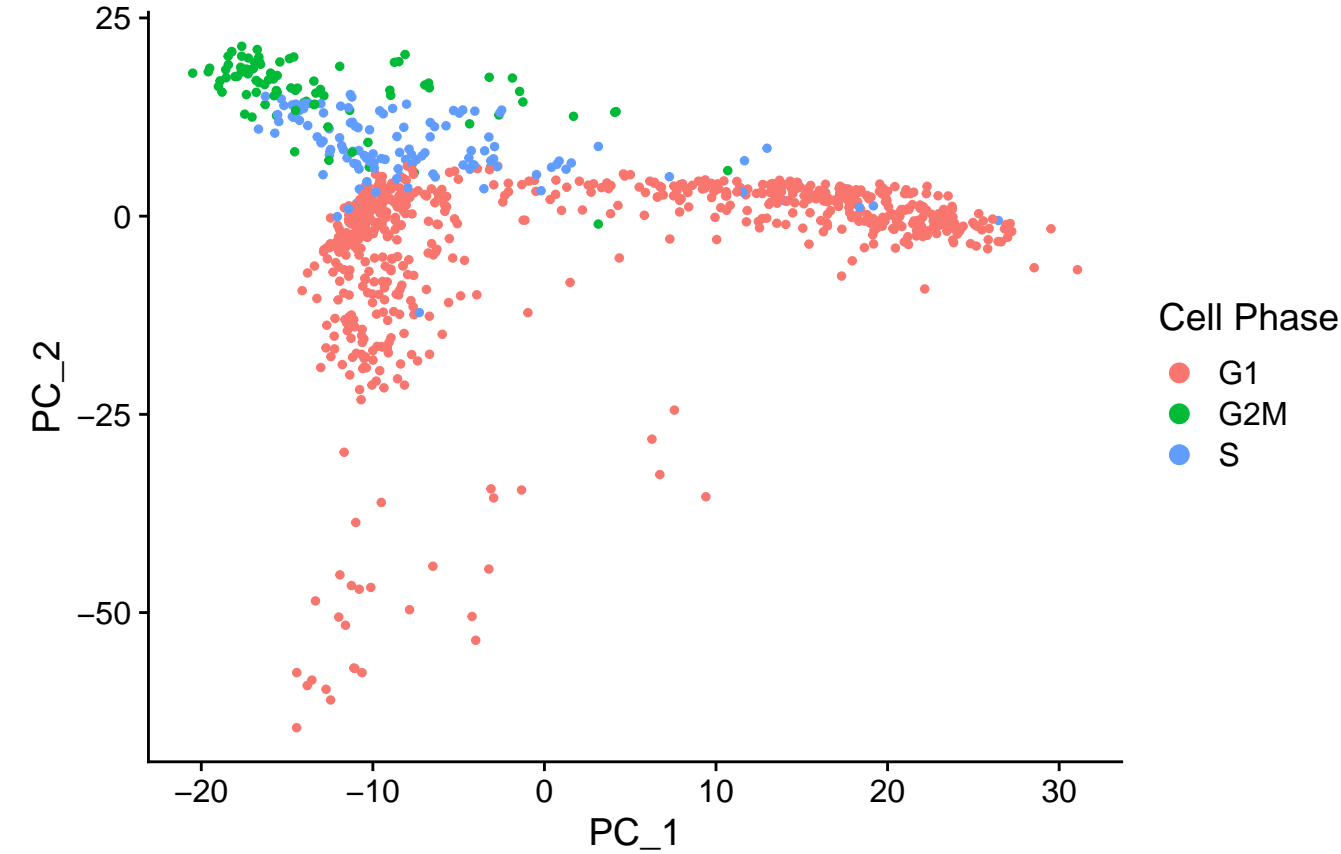
	Metric	Before	After
1	Cells	1331.000000	871.000000
2	Genes	42303.000000	42303.000000
3	Median nCount	20622.000000	28278.000000
4	Median nFeature	6085.000000	7463.000000
5	Median MT%	3.840036	3.97616

## org\_6B – Variable Features & Cell Cycle

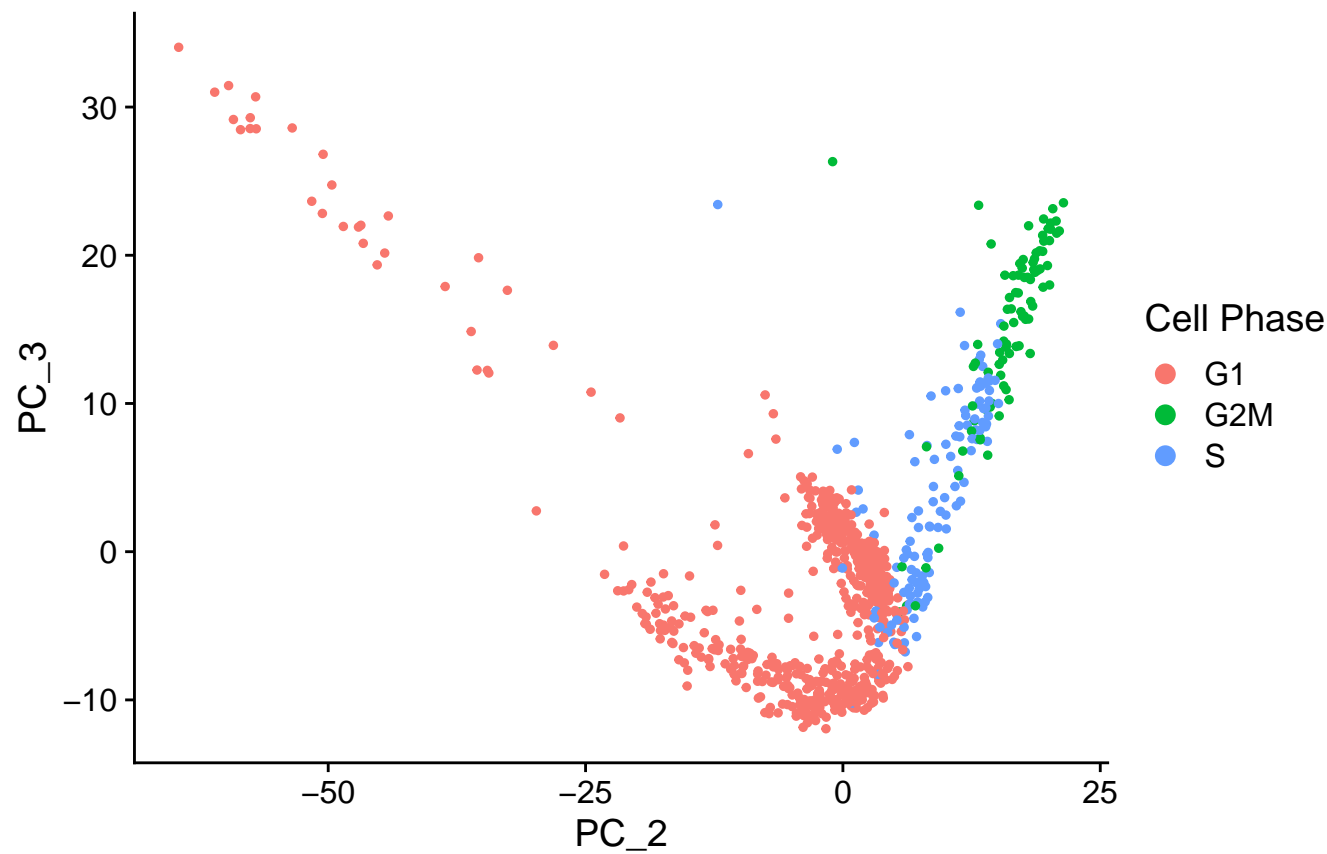
### org\_6B: Top 2000 Variable Genes



### org\_6B: Cell Cycle on PC1 & PC2



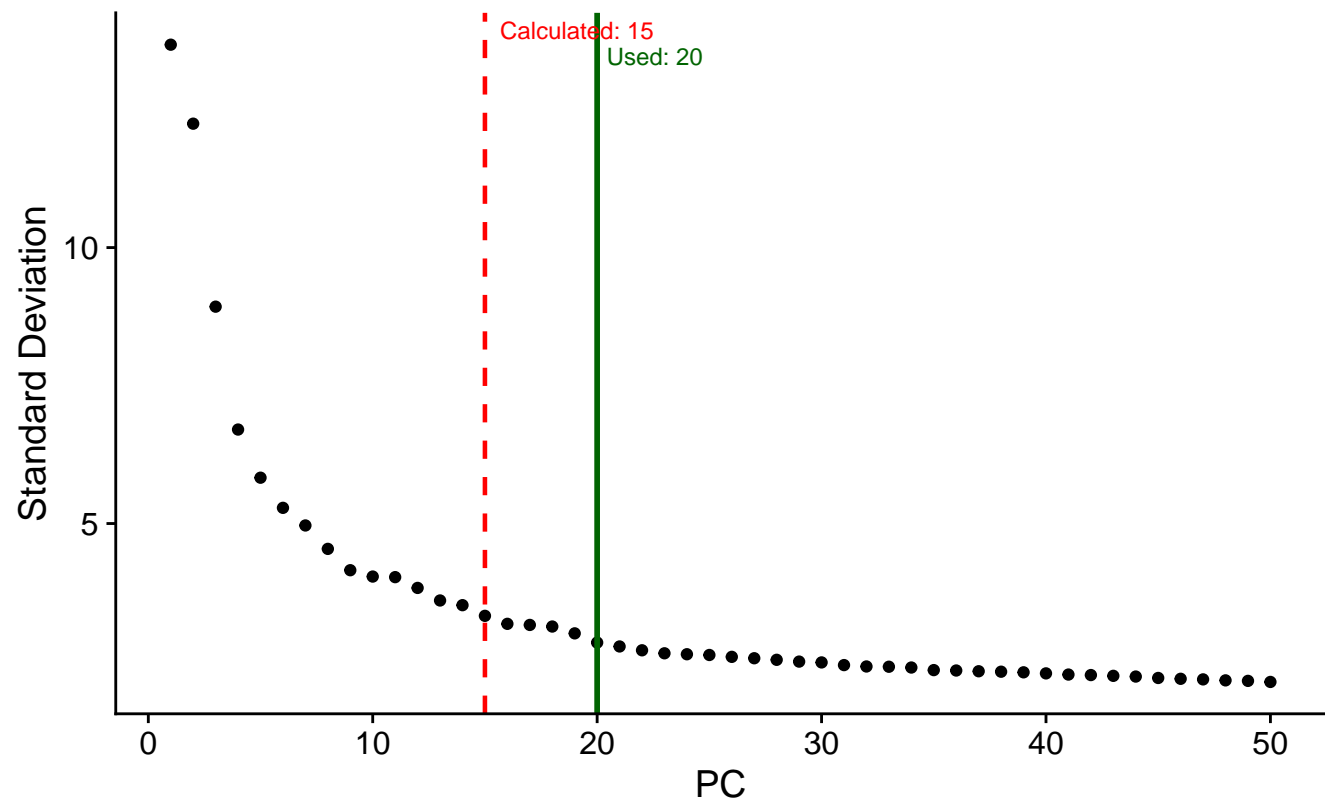
### org\_6B: Cell Cycle on PC2 & PC3



# org\_6B – PCA Selection & Silhouette Analysis

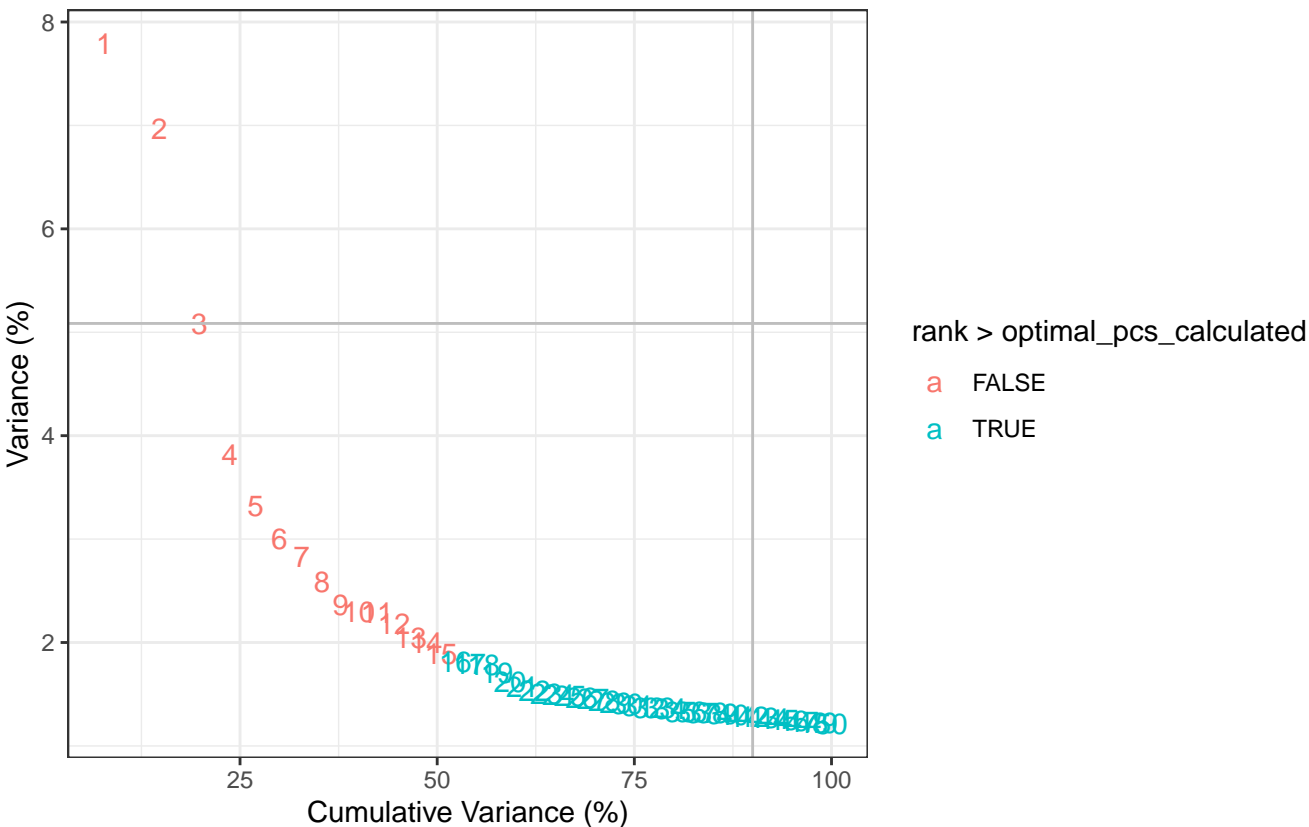
## org\_6B: Elbow Plot

Calculated: 15 PCs | Used: 20 PCs (+5)



## org\_6B: Quantitative PC Selection

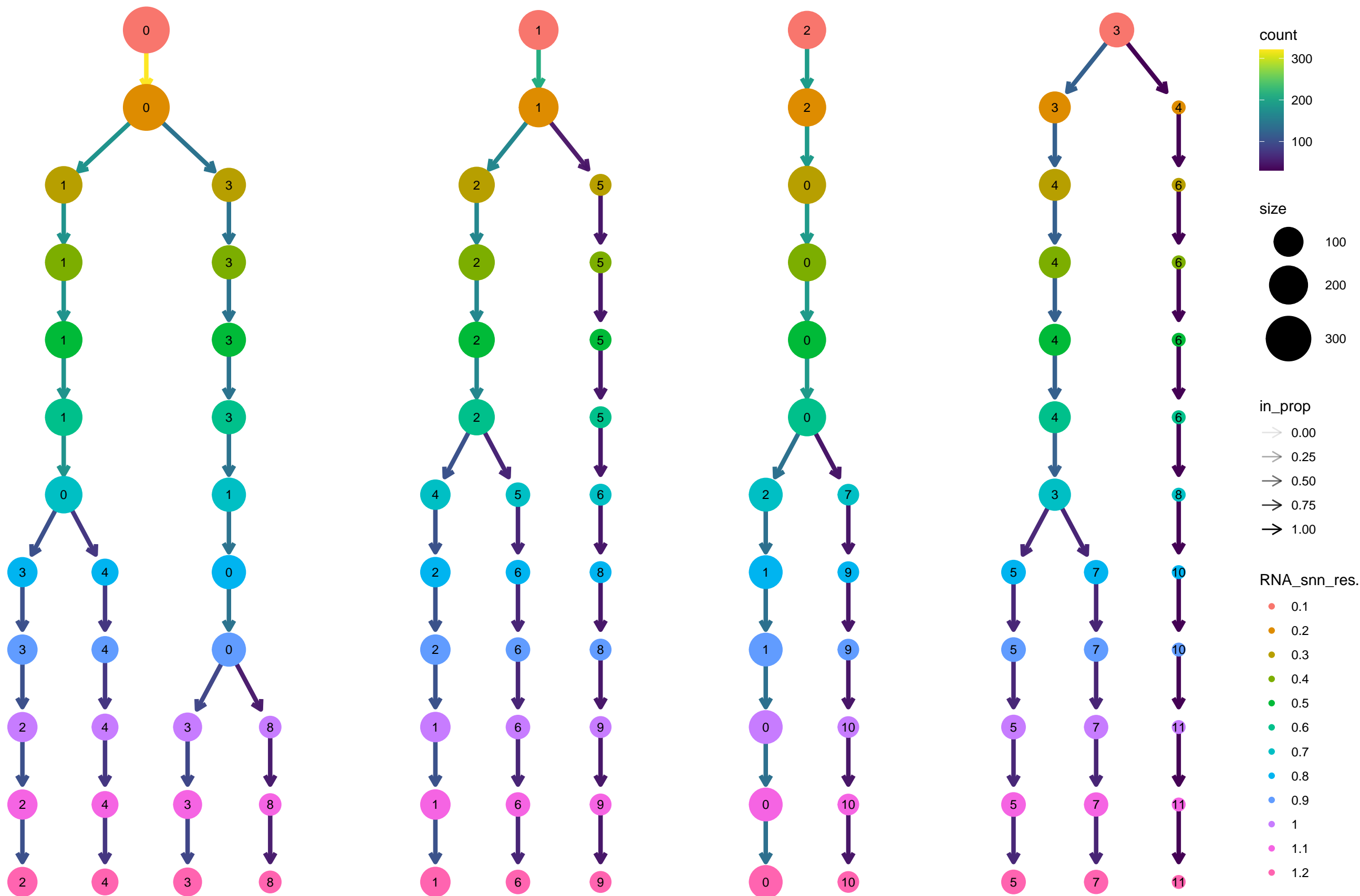
Calculated: 15 PCs | Used: 20 PCs (+5)



	res_vals	num_clusters	avg_sil_vals
1	0.2	5	0.358965114547919
2	0.3	7	0.324173651387618
3	0.1	4	0.314929461574948
4	0.7	9	0.2976305914547
5	1	12	0.278875154045644
6	0.9	11	0.261163338761591

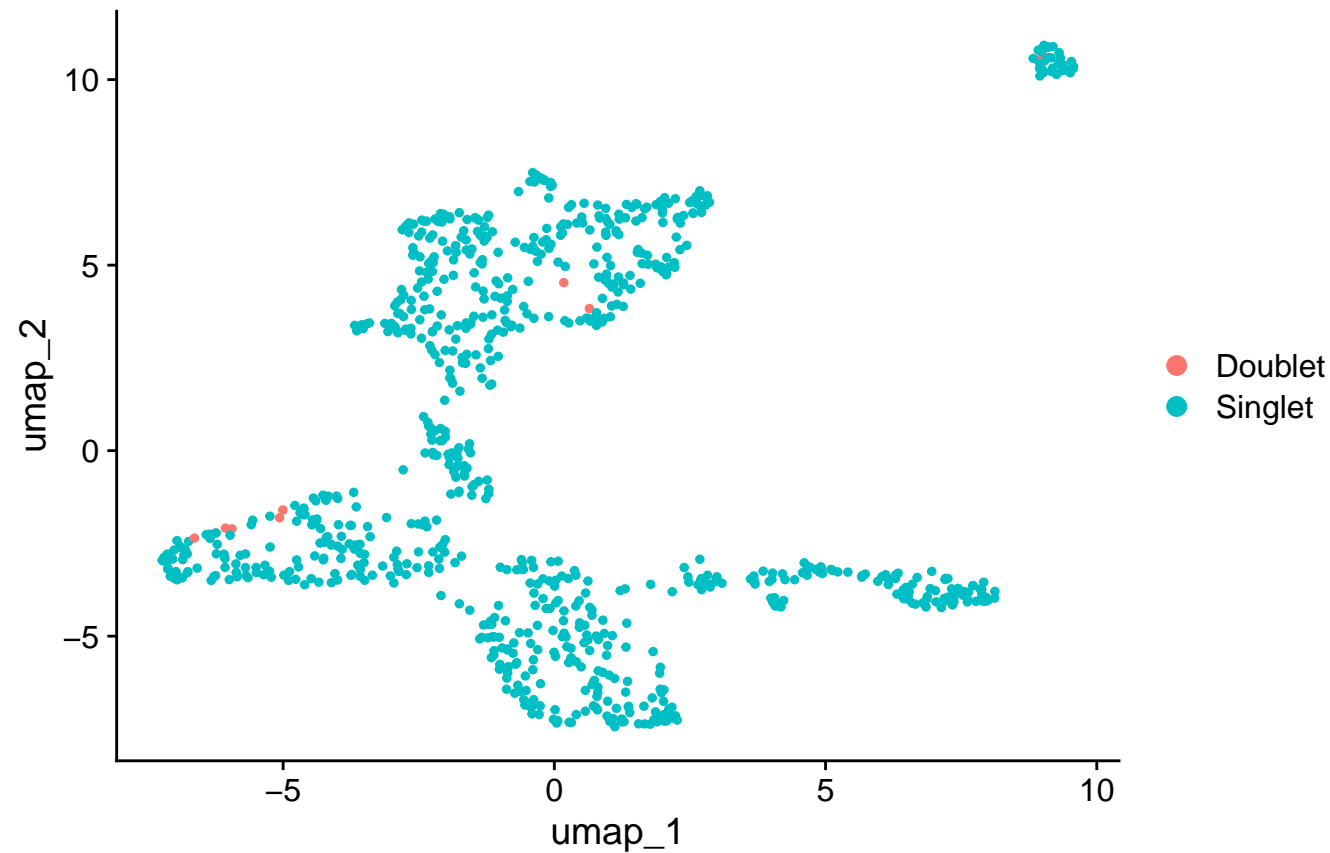
org\_6B: Clustree

org\_6B – Clustering Resolution Tree

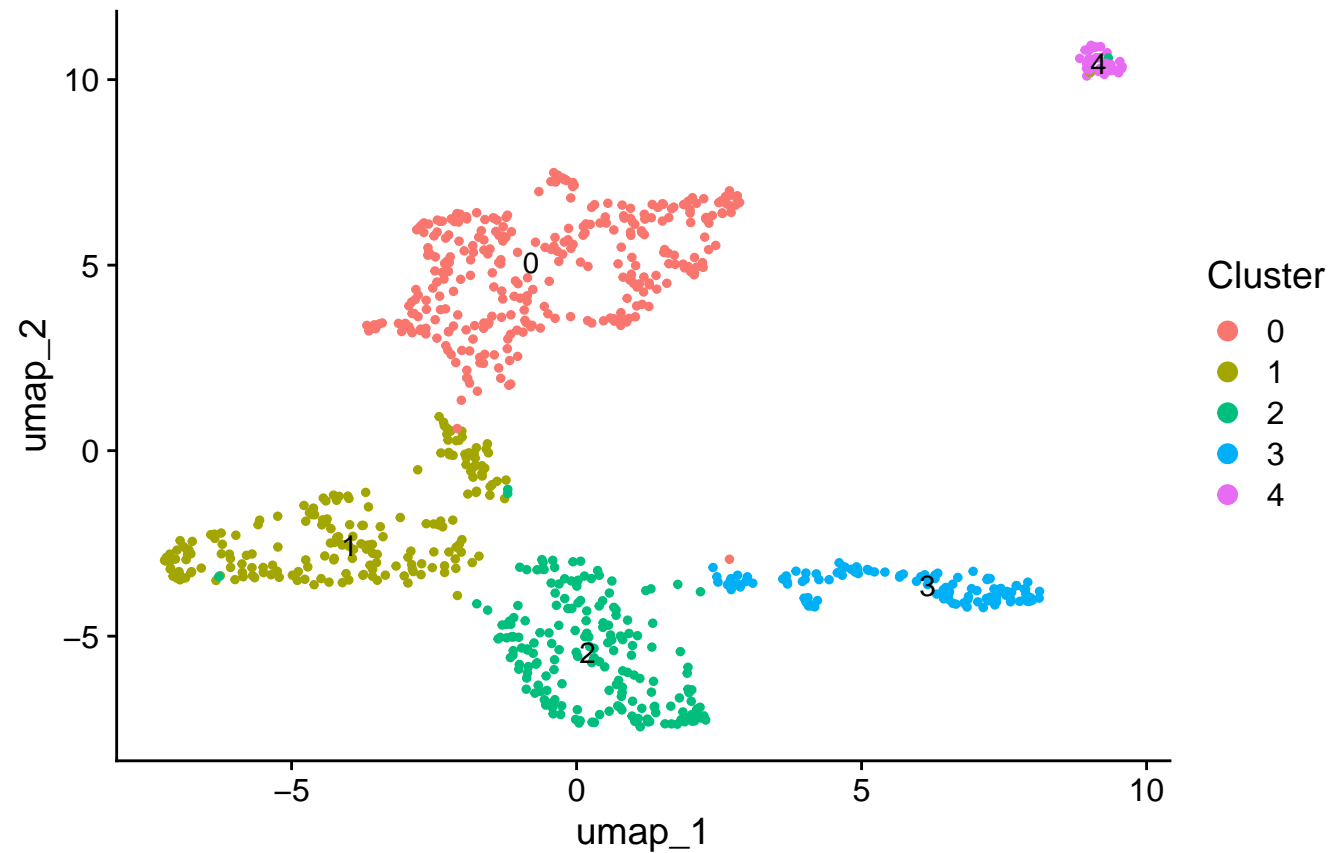


# org\_6B – UMAP & Doublet Removal

org\_6B: Doublets Detected



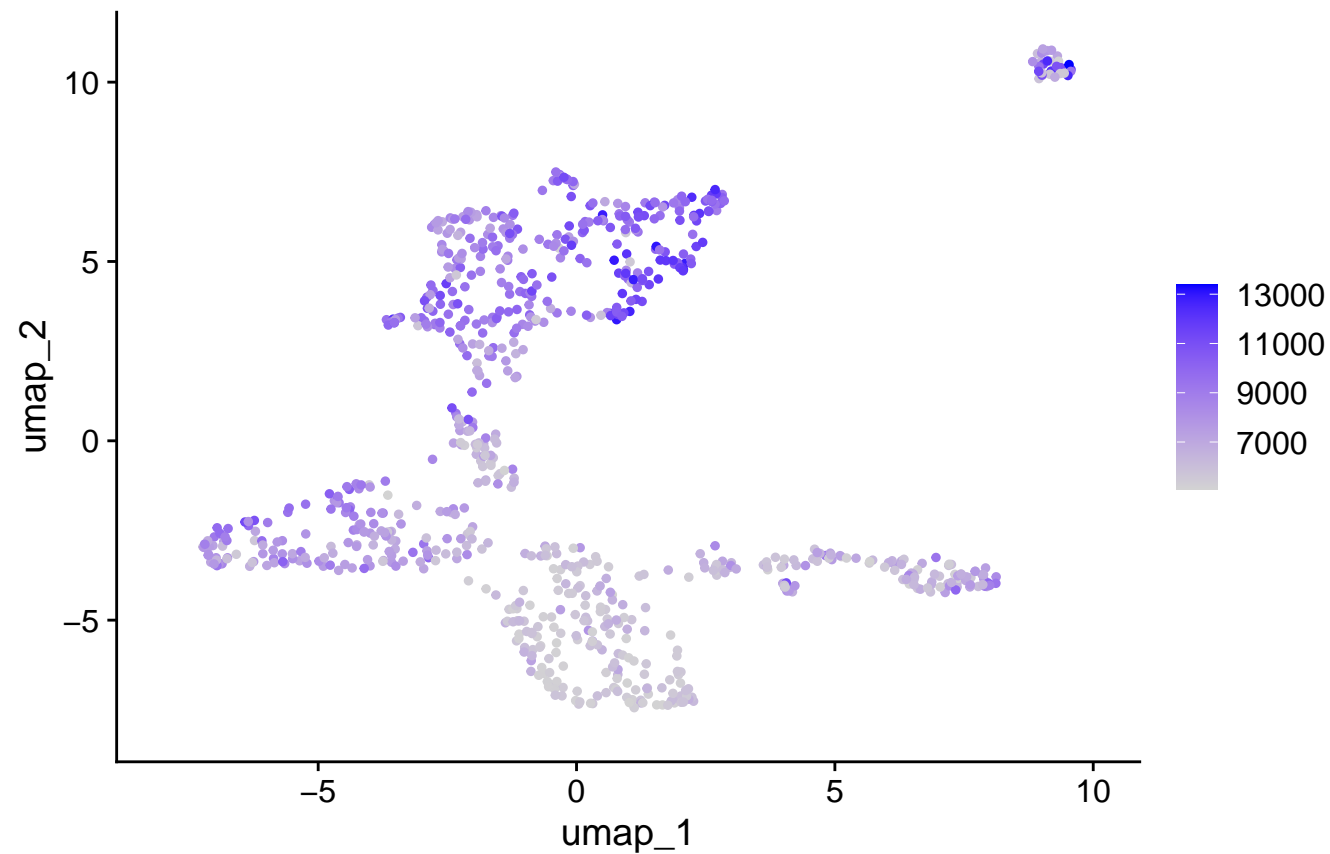
org\_6B: Final UMAP



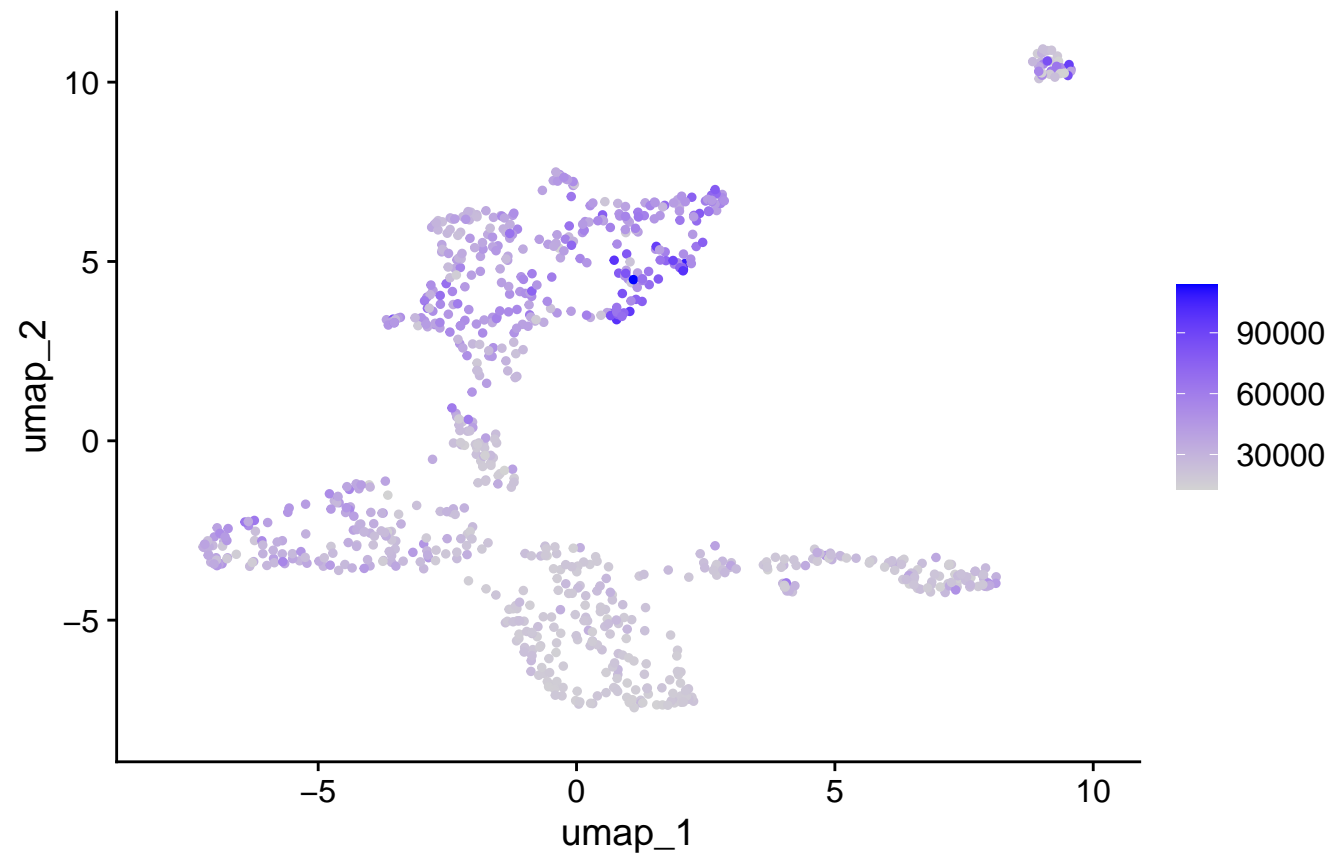
	DF.classifications	median_nCount	median_nFeature	count
1	Doublet	59892.5	10880	10
2	Singlet	28050.0	7433	861

# org\_6B – QC Metrics & Cell Cycle on UMAP

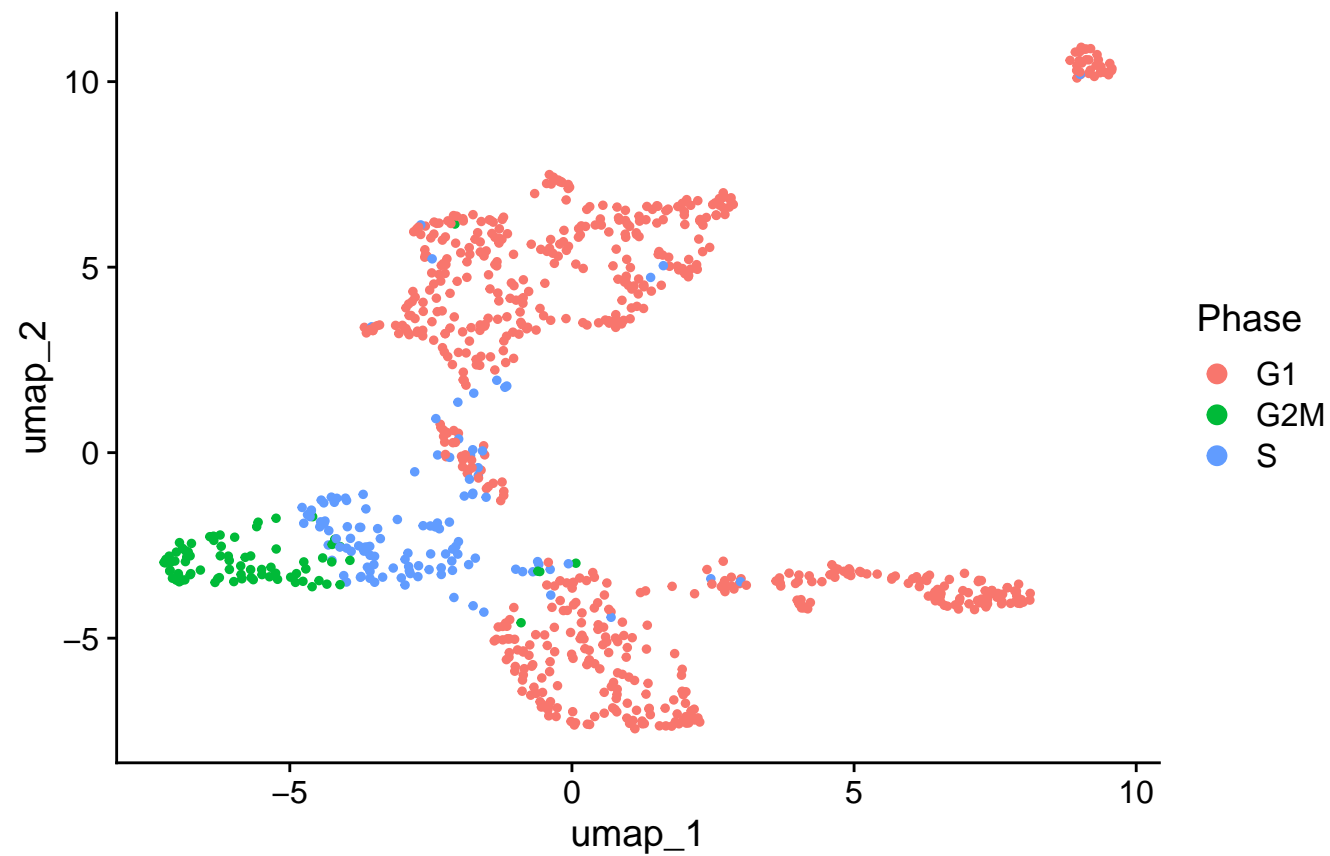
## org\_6B: nFeature\_RNA



## org\_6B: nCount\_RNA



## org\_6B: Cell Cycle Phase



## org\_6B: Final UMAP

