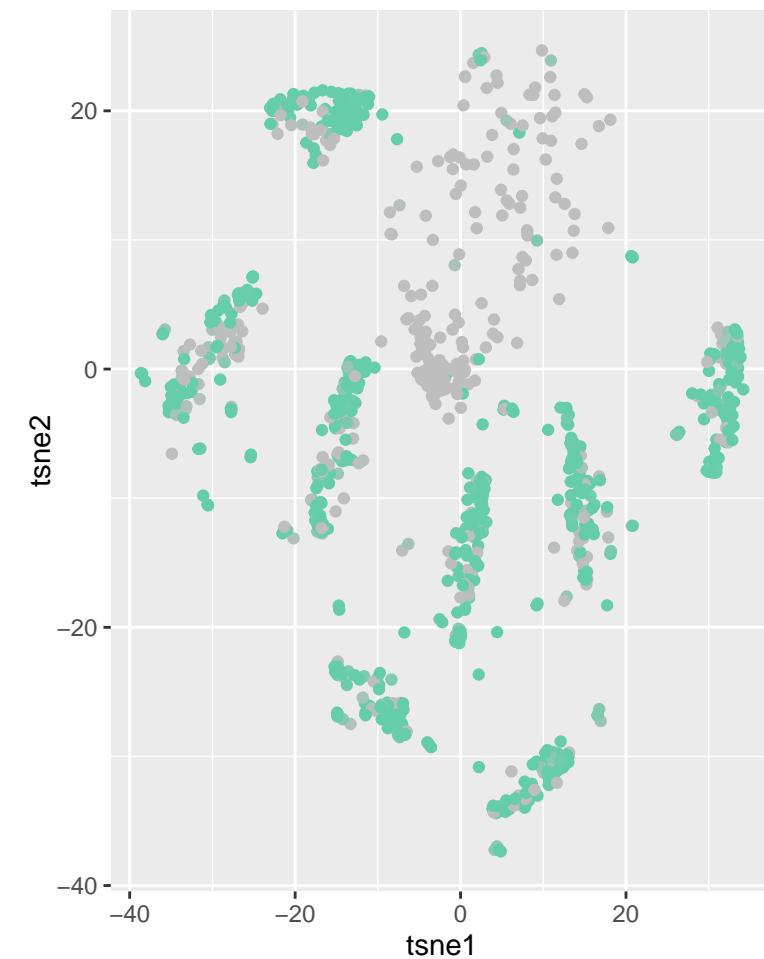
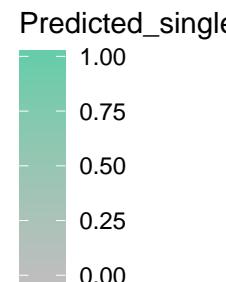


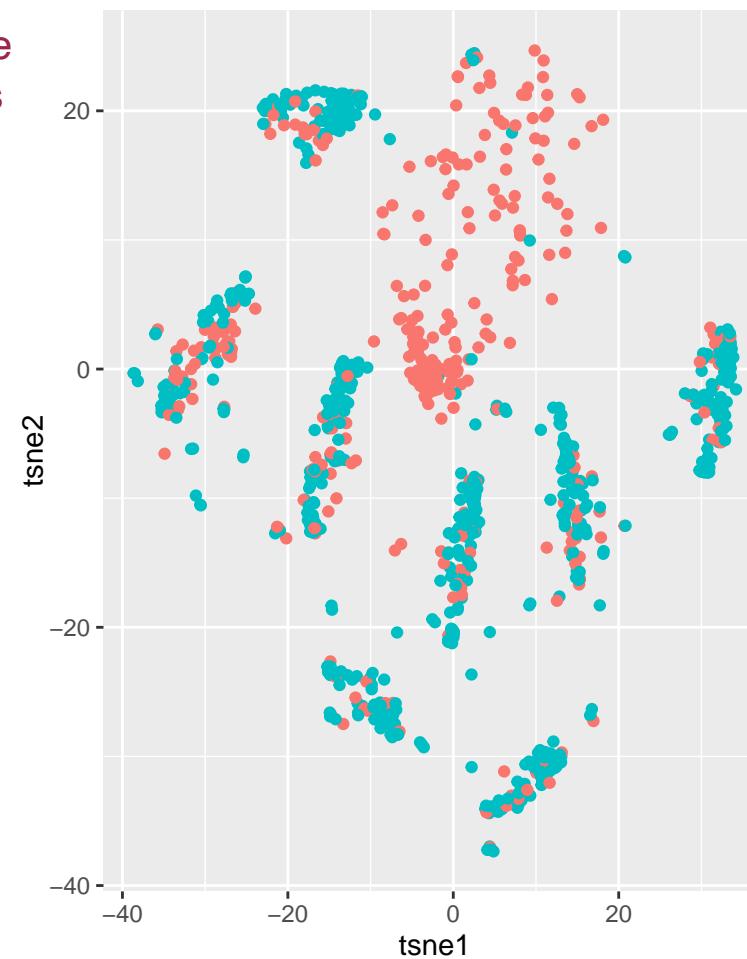
barcodes in the cutoff area



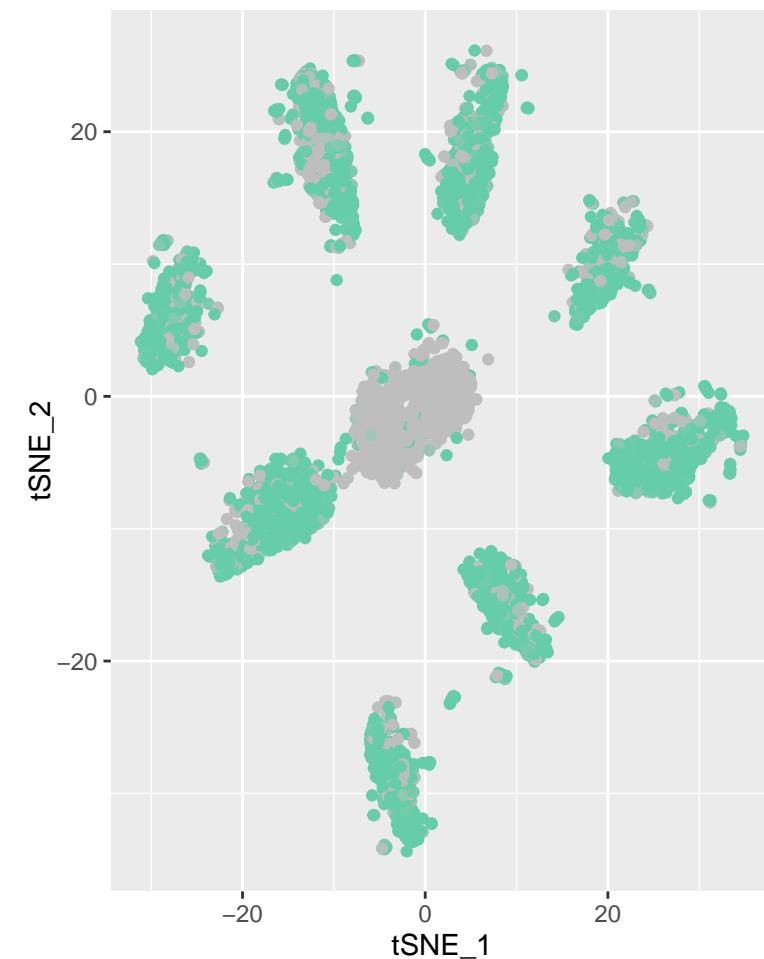
Original tsne  
coordinates



barcodes in the cutoff area

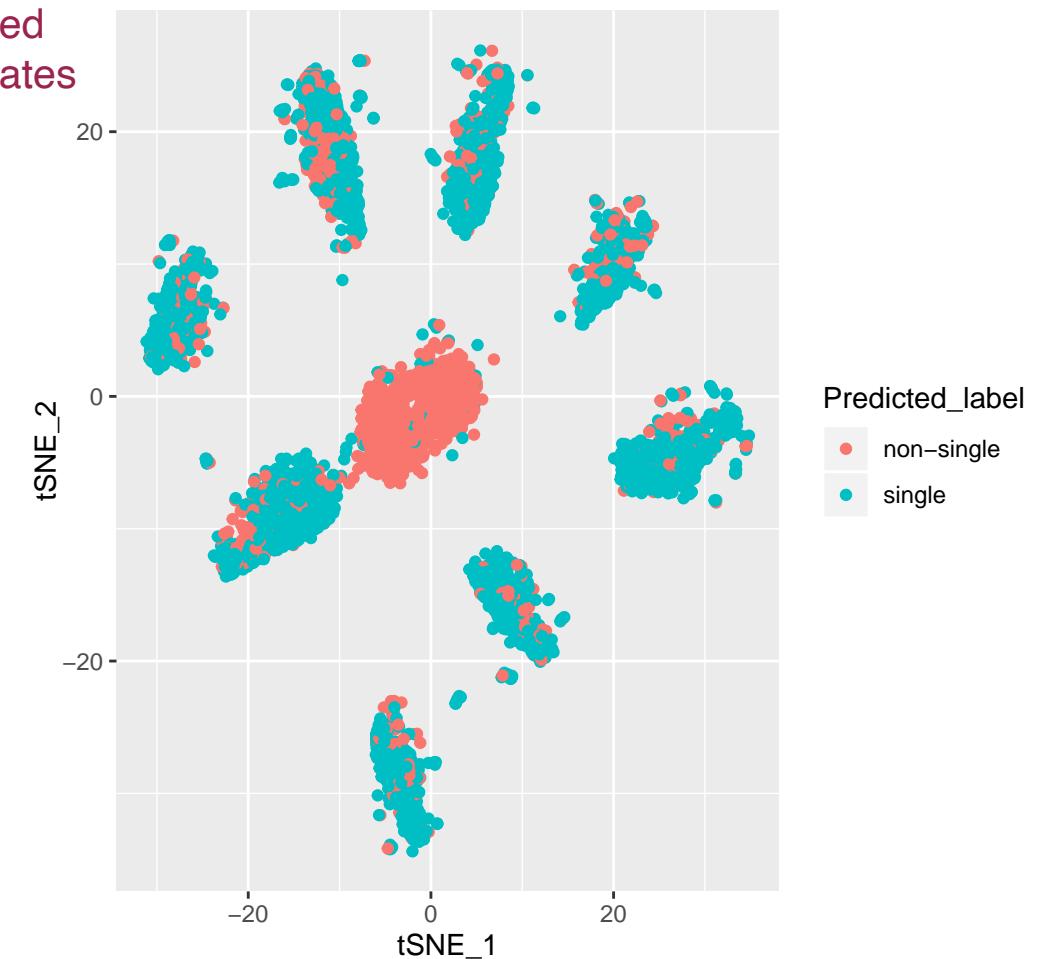


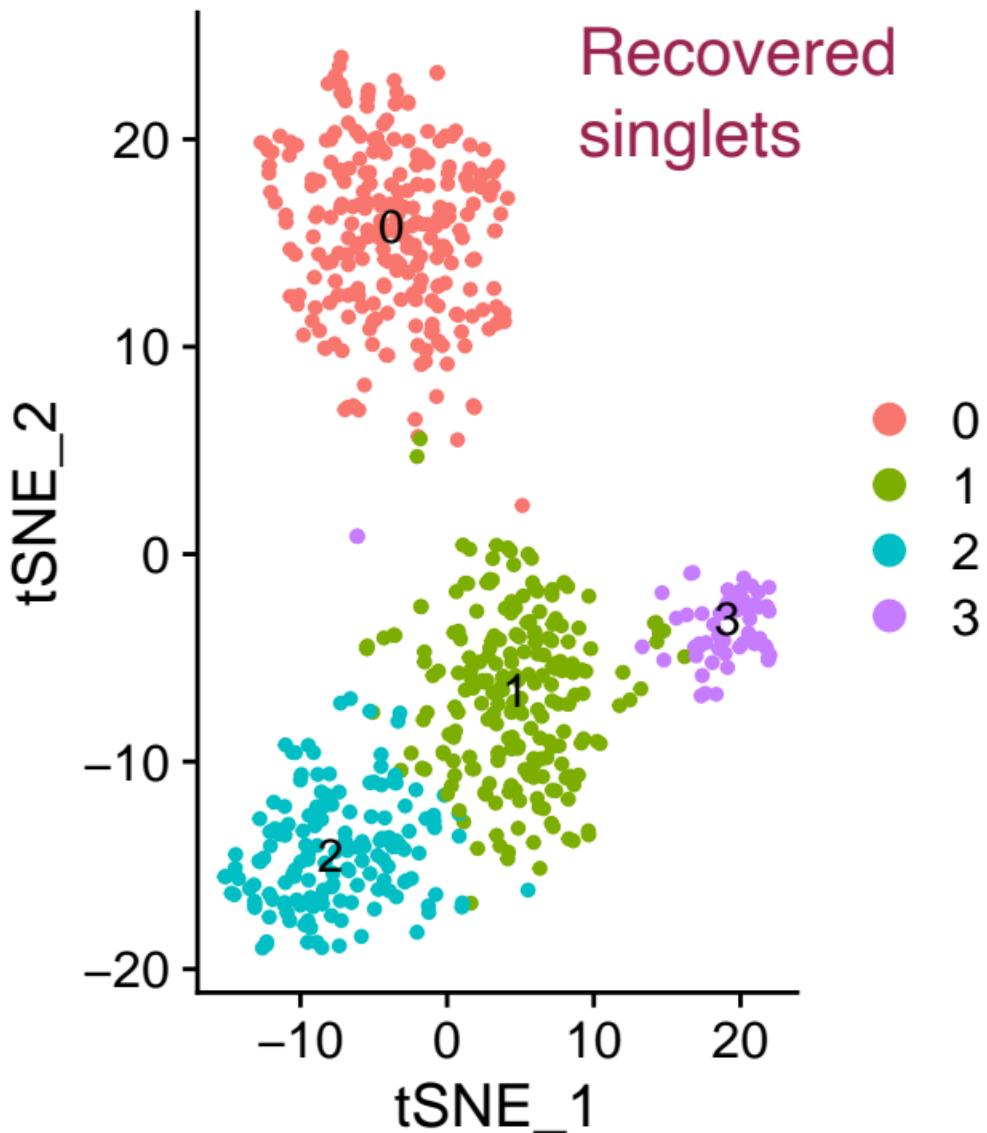
barcodes in the cutoff area

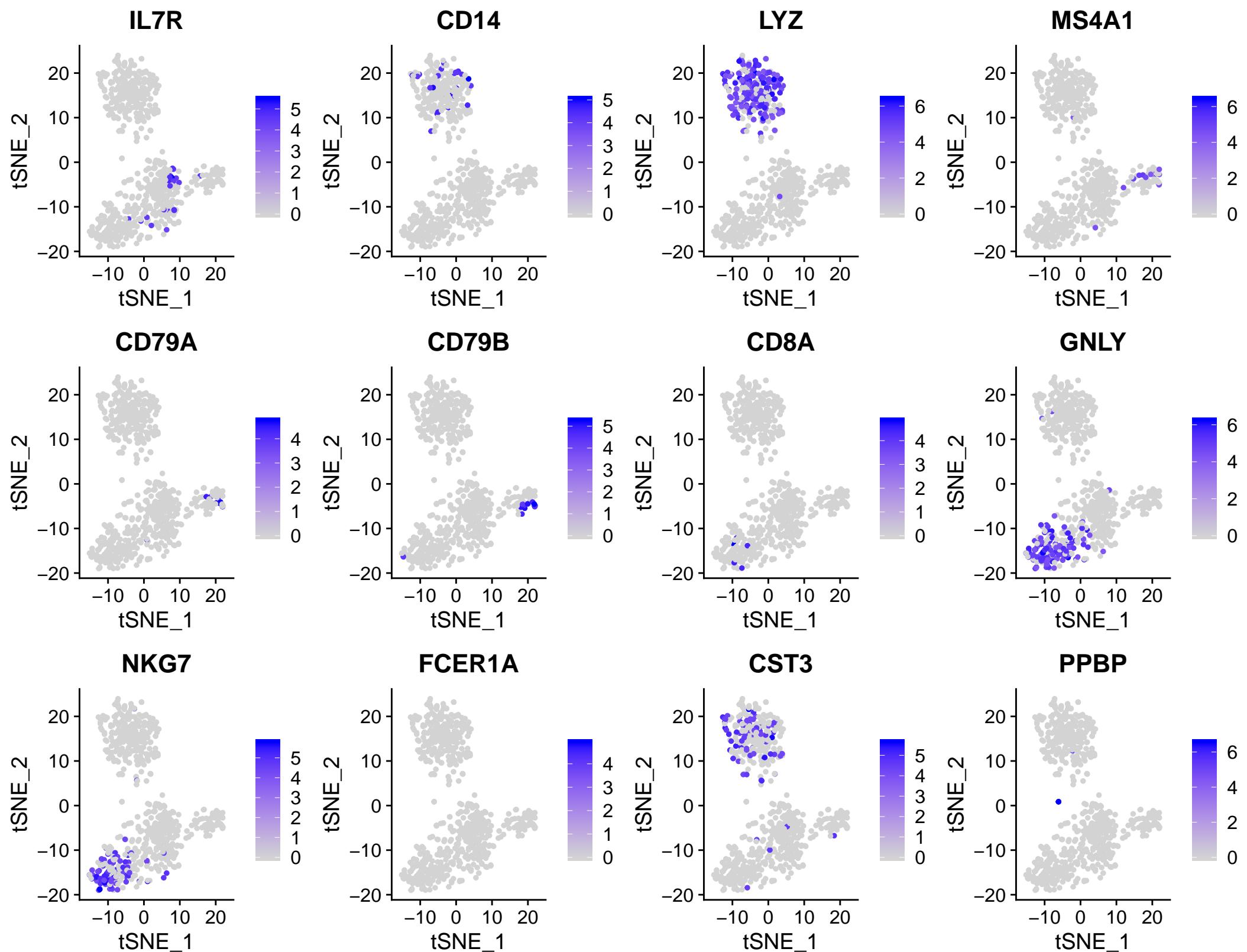


New calculated  
tsne coordinates

barcodes in the cutoff area







```
> top20$gene[top20$cluster==0] CD14+ Mono
```

```
[1] "S100A8"          "LYZ"           "FOS"           "S100A9"         "RP11-1143G9.4"  
[6] "AIF1"            "TYROBP"        "LST1"          "DUSP1"          "FCN1"  
[11] "S100A12"        "SRGN"          "CST3"          "CYBB"          "LGALS1"  
[16] "VCAN"           "MNDA"          "AP1S2"         "CD14"          "GRN"
```

```
> top20$gene[top20$cluster==1] Memory CD4
```

```
[1] "LTB"             "ETS1"          "EEF2"          "PCED1B-AS1"    "FOXP1"         "BTF3"  
[7] "IL32"            "CD3D"          "LIMD2"         "C1orf56"
```

```
> top20$gene[top20$cluster==2] NK
```

```
[1] "GNLY"            "NKG7"          "CCL5"          "GZMA"          "CTSW"          "GZMH"  
[7] "CST7"            "KLRD1"         "PRF1"          "CMC1"          "KLRF1"         "FGFBP2"  
[13] "PTPRCAP"         "AC092580.4"   "APOBEC3C"     "DSTN"          "IL2RG"         "IFITM1"  
[19] "MY01F"           "CD3D"
```

```
> top20$gene[top20$cluster==3] B cell
```

```
[1] "IGHM"            "CD74"          "IGHD"          "CD79B"         "LINC00926"    "IGLC3"  
[7] "HLA-DRA"         "BCL11A"        "MS4A1"         "HLA-DQB1"      "CD79A"         "HLA-DMA"  
[13] "HLA-DPB1"        "MEF2C"         "HLA-DRB1"      "FAIM3"         "RCSD1"         "CD69"  
[19] "SNHG6"           "CXCR4"
```

