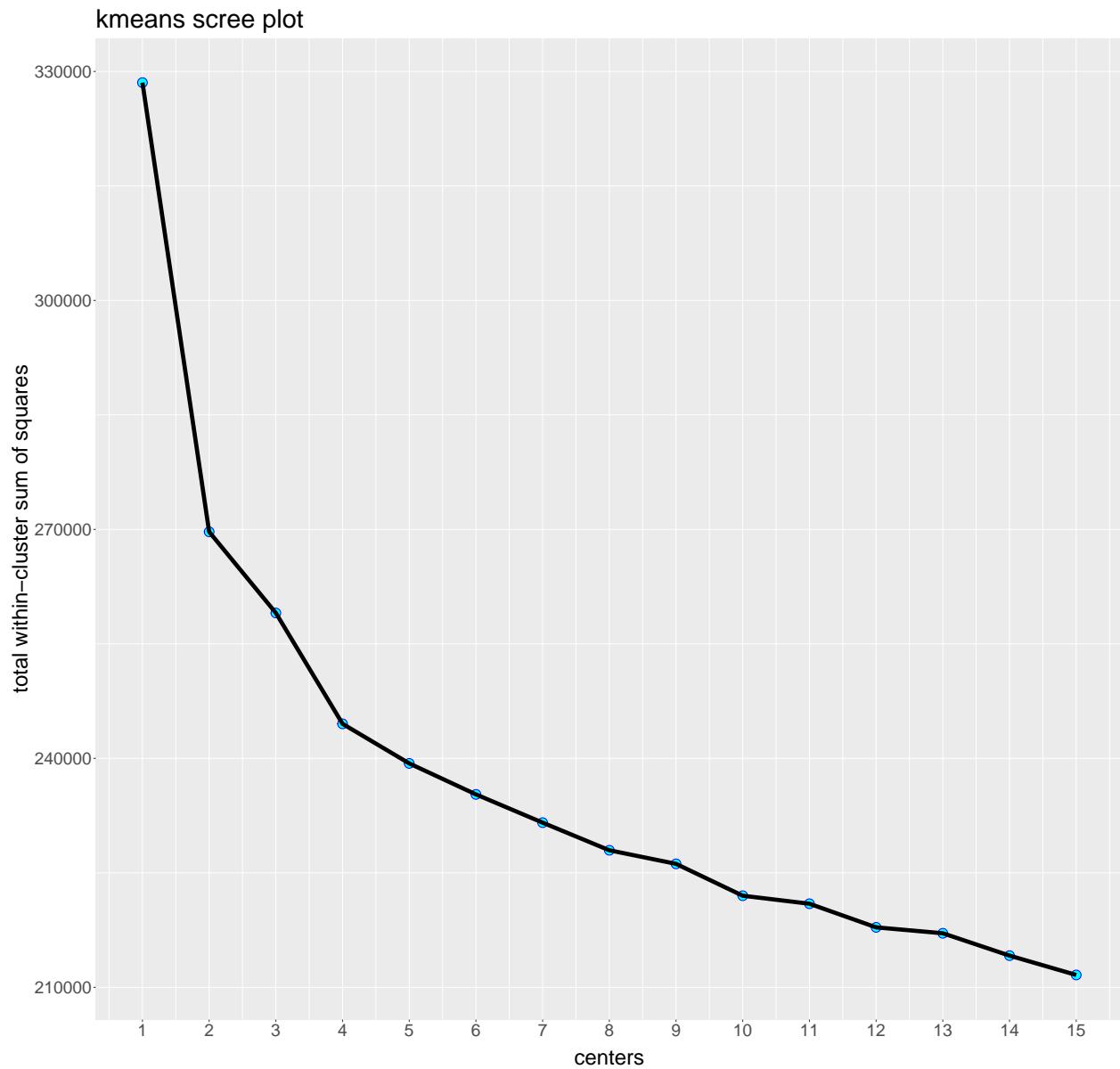
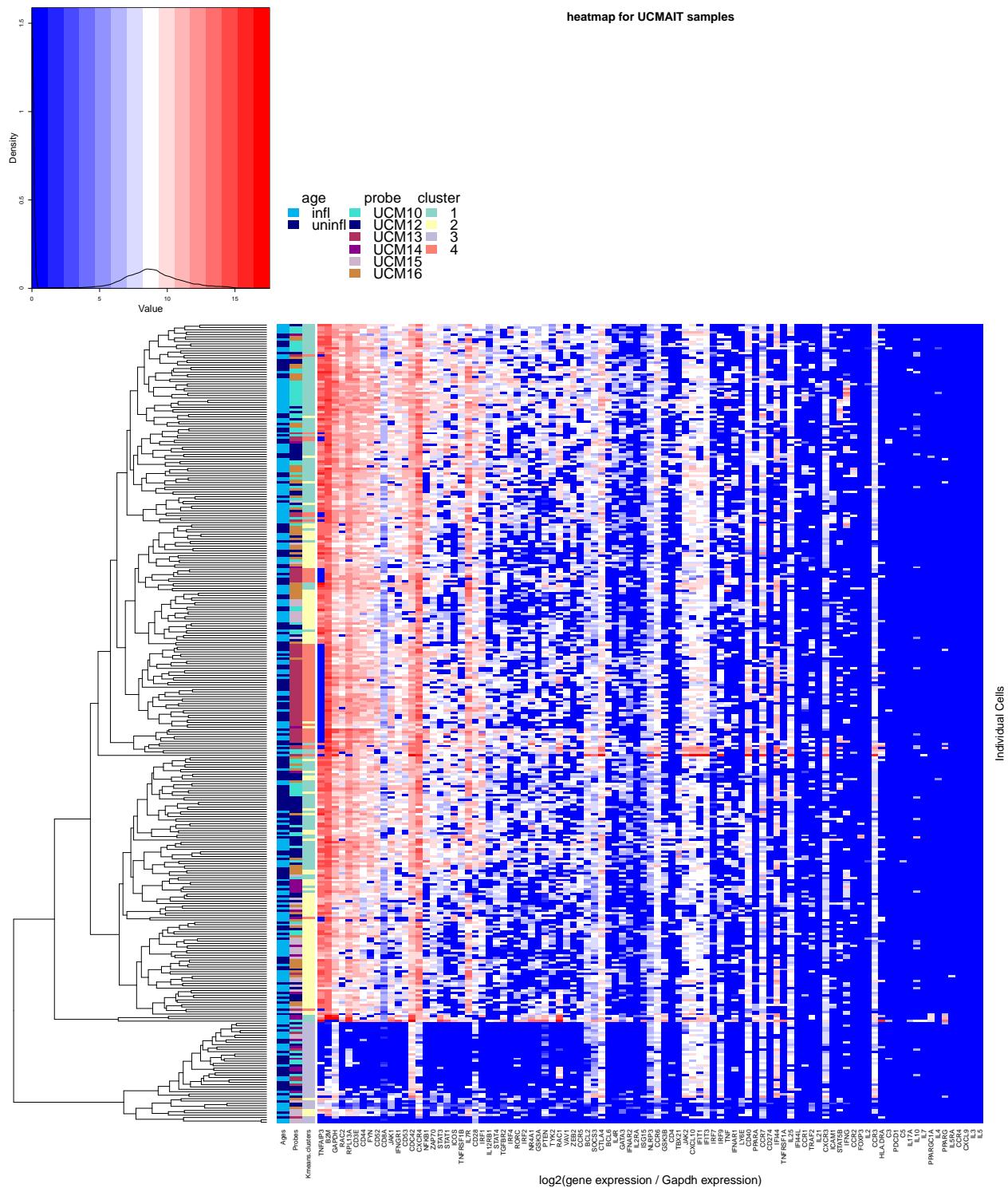


# UC-MAIT analysis (tissue only)

No expression detected in 2/342 cells





[1]

[1]

[1] Probe vs. Cluster

	probe_UCM10	probe_UCM12	probe_UCM13	probe_UCM14	probe_UCM15
cluster_1	51	39	0	6	2
cluster_2	13	26	2	11	31
cluster_3	10	10	6	7	5

```
cluster_4          0          0      56      1          0
                  probe_UCM16
cluster_1          30
cluster_2          32
cluster_3          1
cluster_4          1
```

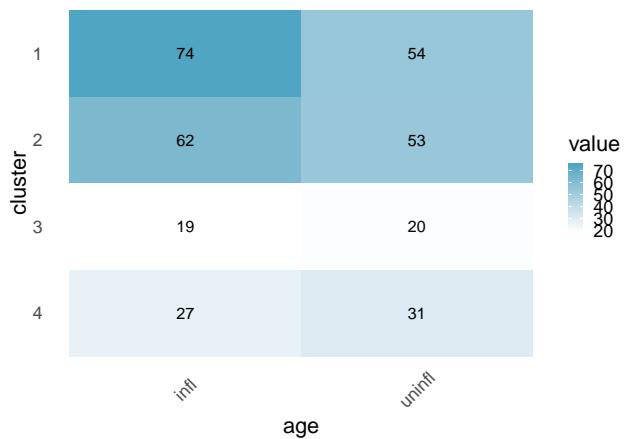
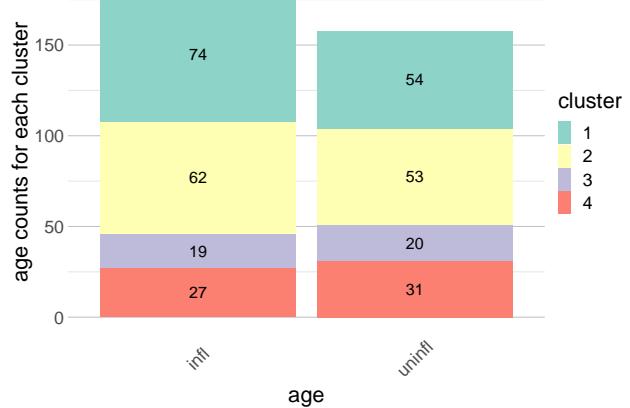
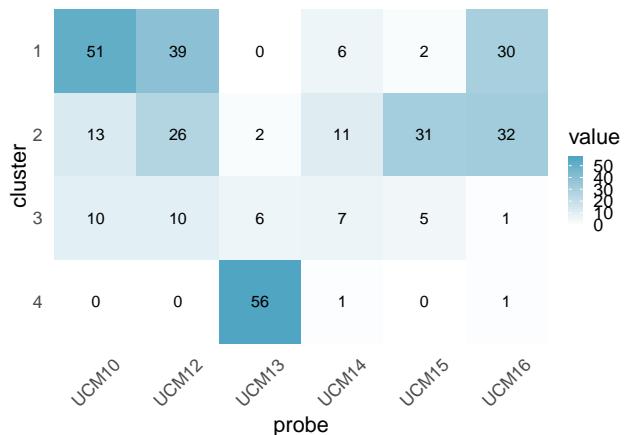
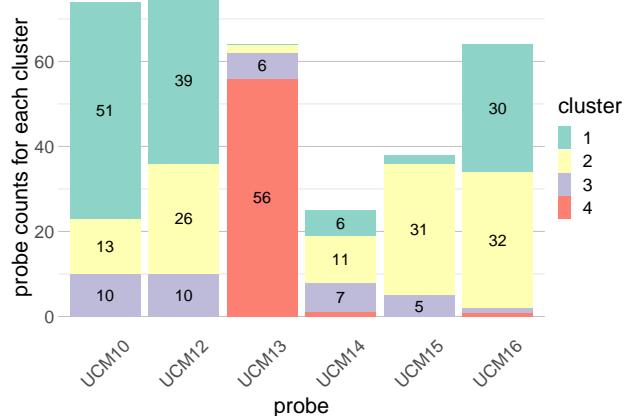
Pearson's Chi-squared test with simulated p-value (based on 2000  
replicates)

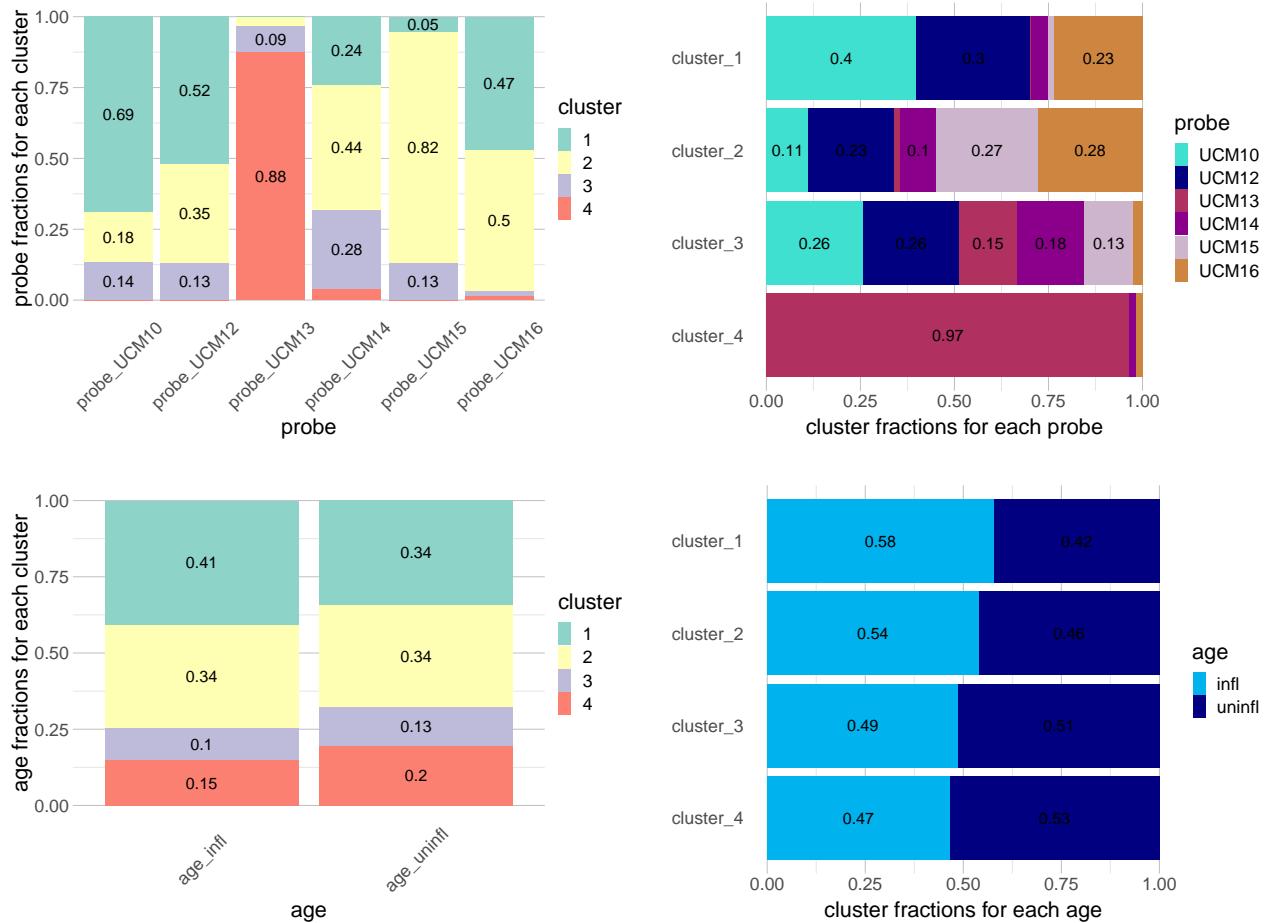
```
data:  probeTable
X-squared = 357.49, df = NA, p-value = 0.0004998
```

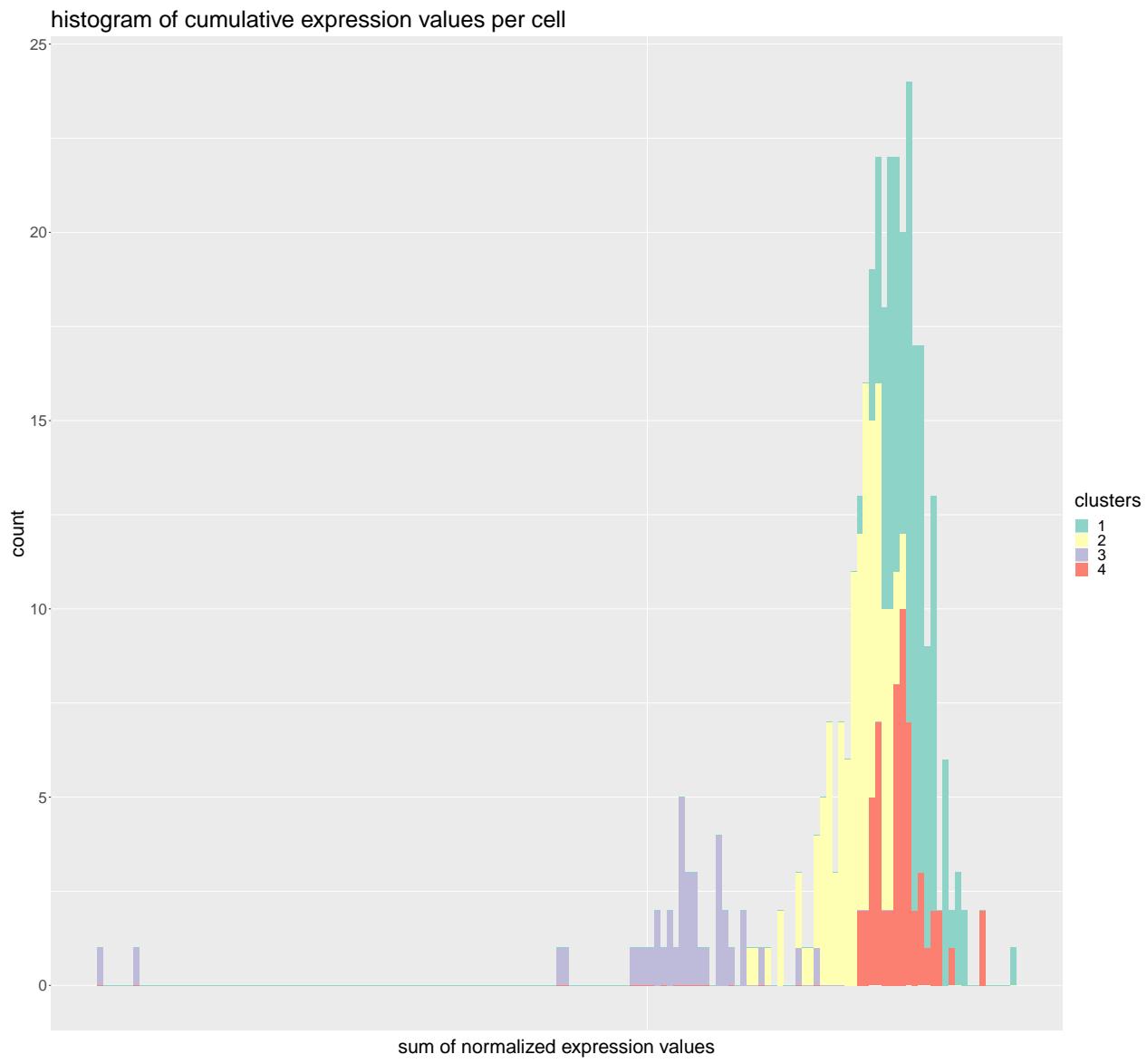
```
[1]
[1]
[1] age vs. Cluster
      age_infl age_uninfl
cluster_1      74      54
cluster_2      62      53
cluster_3      19      20
cluster_4      27      31
```

Pearson's Chi-squared test with simulated p-value (based on 2000  
replicates)

```
data:  ageTable
X-squared = 2.4489, df = NA, p-value = 0.4863
```

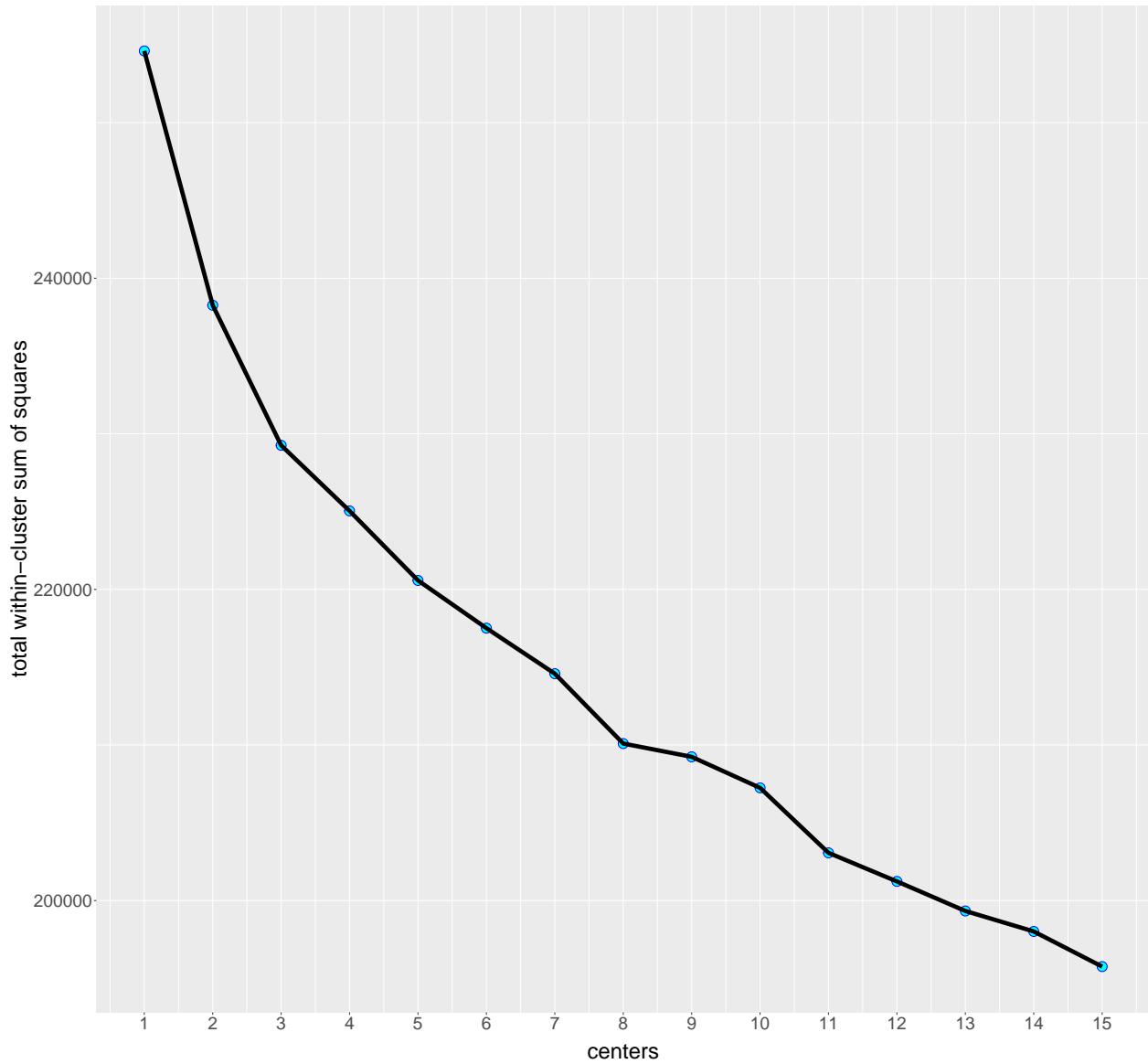


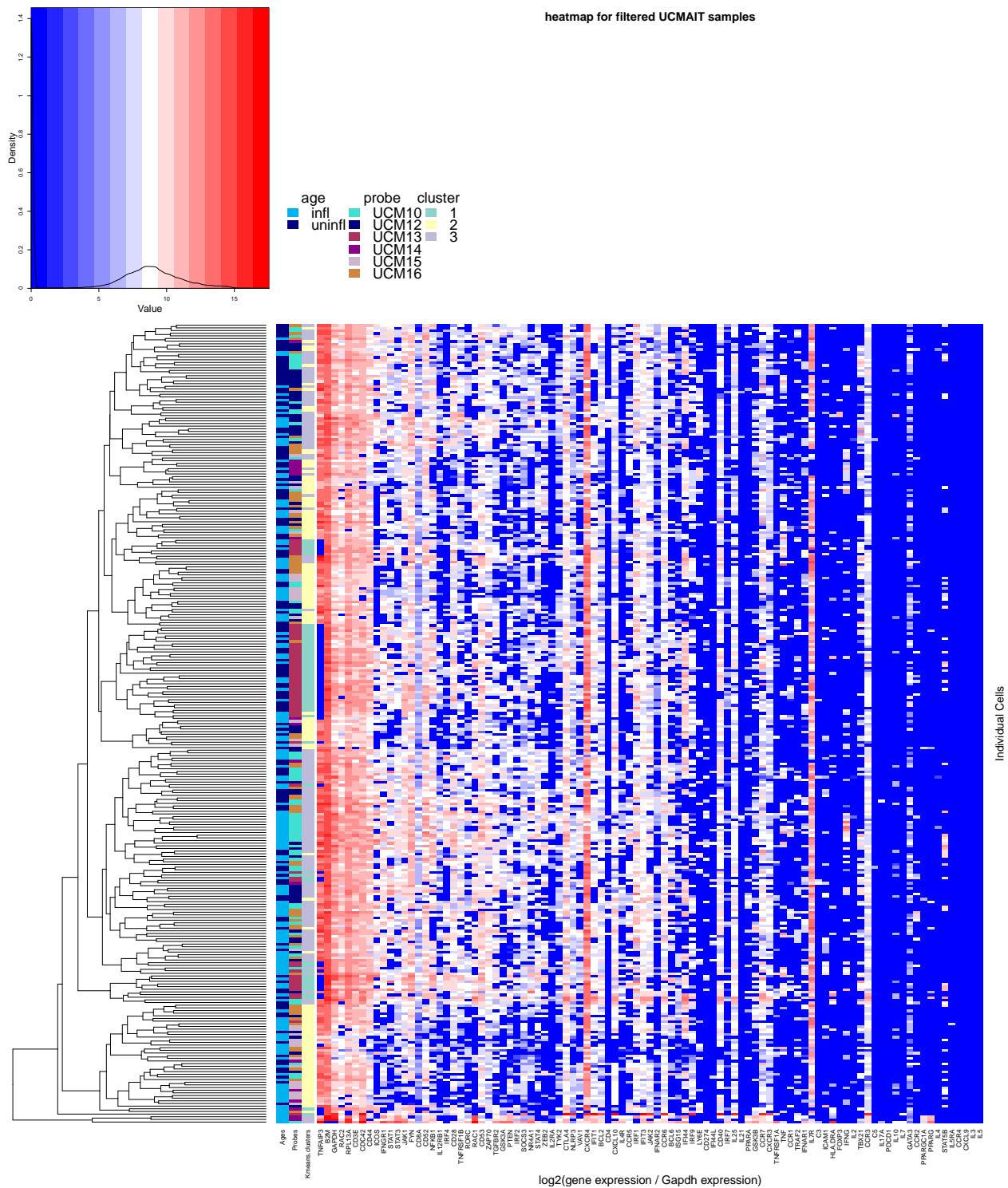




39 / 340 cells were removed due to low gene expression (cluster ID of removed clusters: 3)

kmeans scree plot





```

probe_UCM16
cluster_1      1
cluster_2     32
cluster_3     30

```

Pearson's Chi-squared test with simulated p-value (based on 2000 replicates)

```

data: probeTable
X-squared = 339.82, df = NA, p-value = 0.0004998

```

```

[1]
[1]
[1] age vs. Cluster
      age_uninfl age_infl
cluster_1      31      27
cluster_2      53      62
cluster_3      54      74

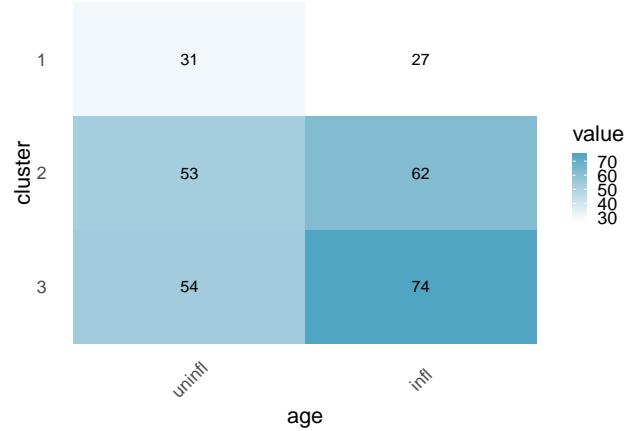
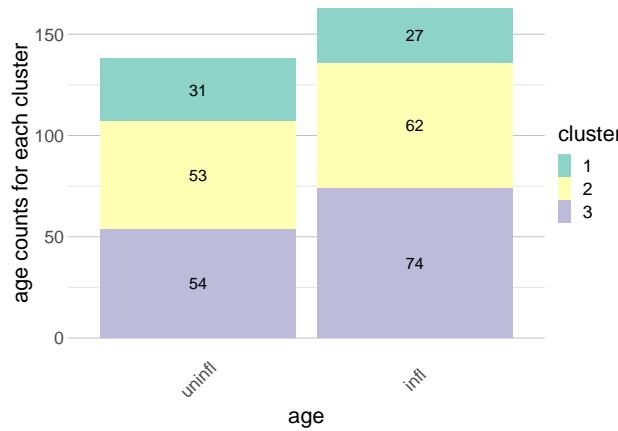
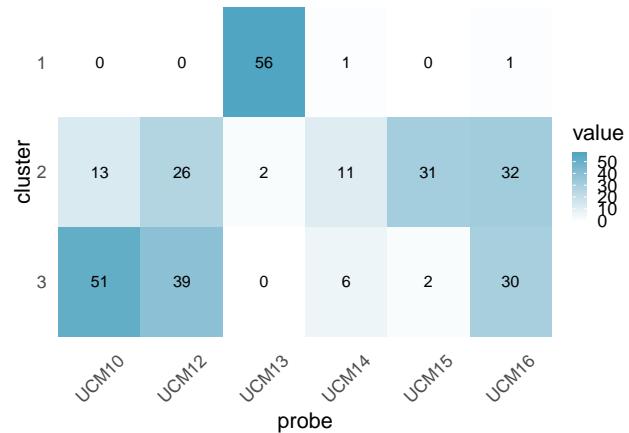
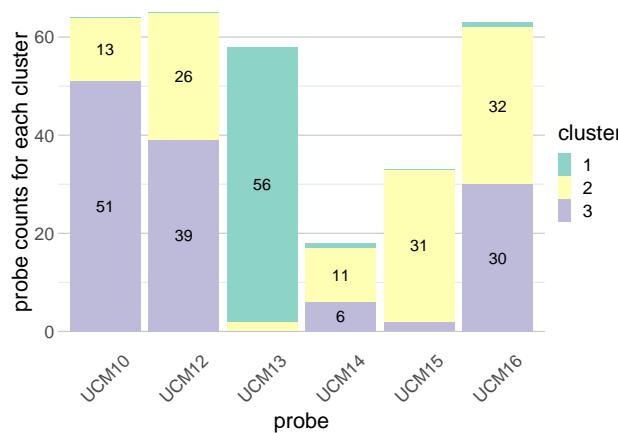
```

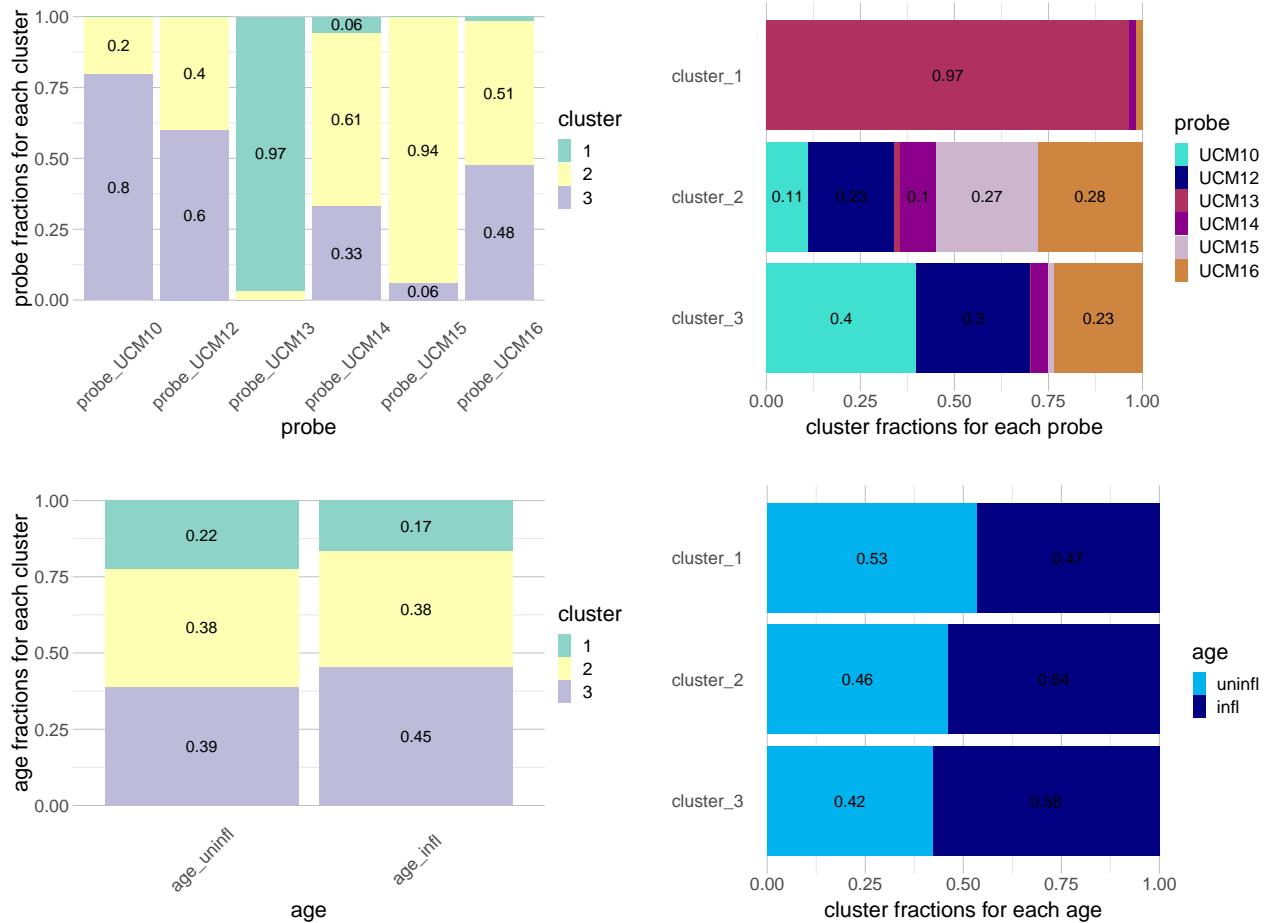
Pearson's Chi-squared test with simulated p-value (based on 2000 replicates)

```

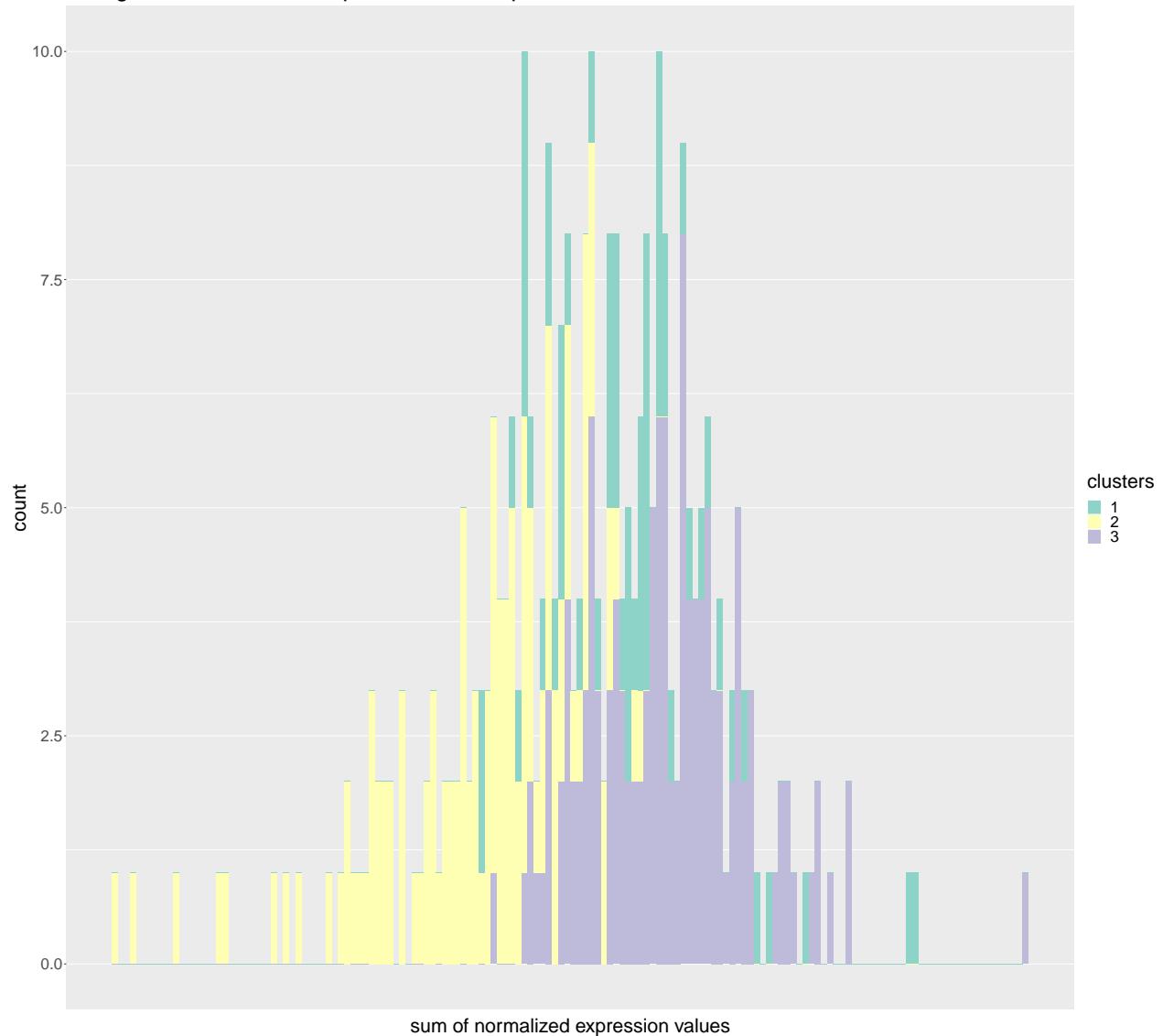
data: ageTable
X-squared = 2.0429, df = NA, p-value = 0.3543

```

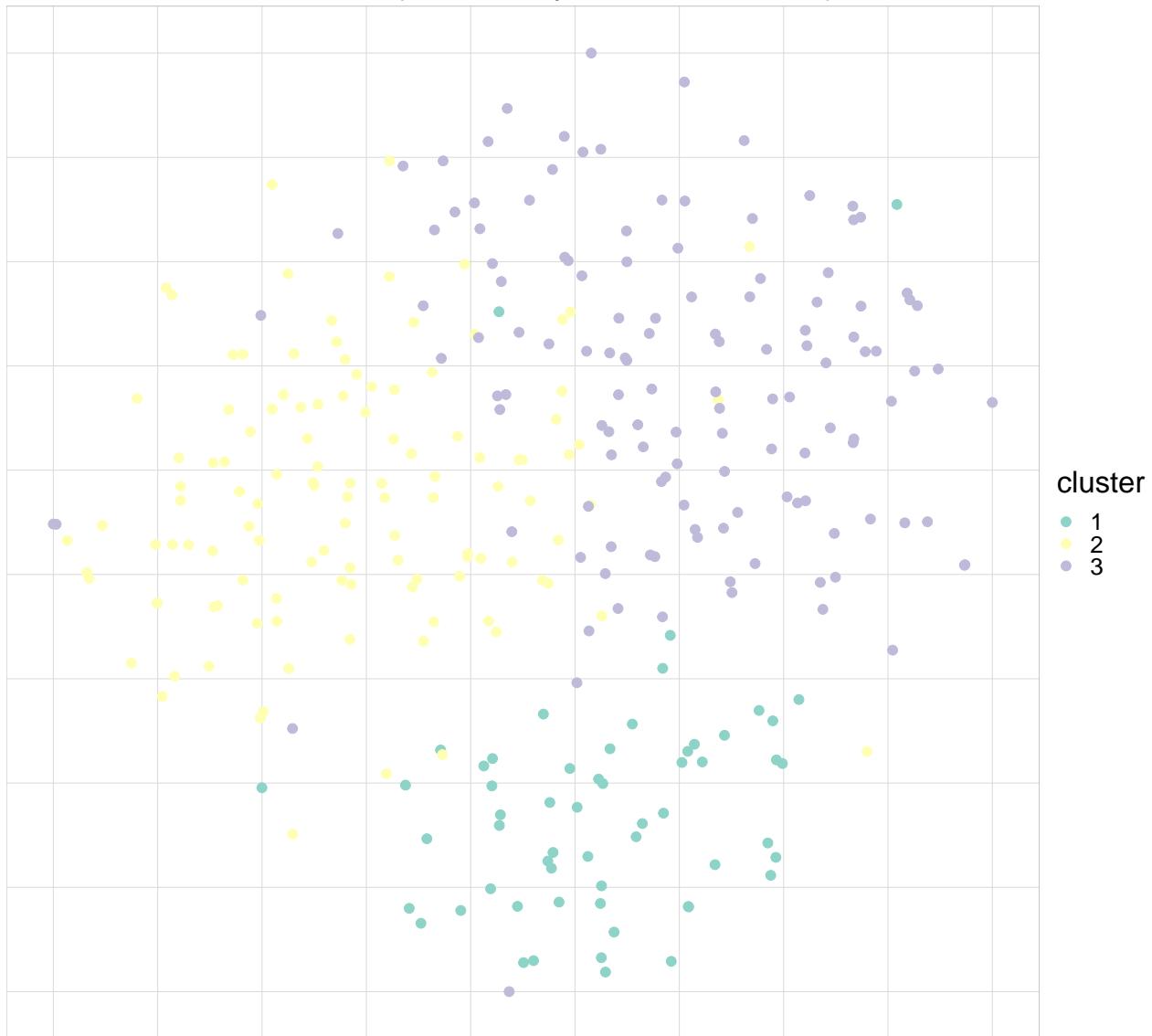




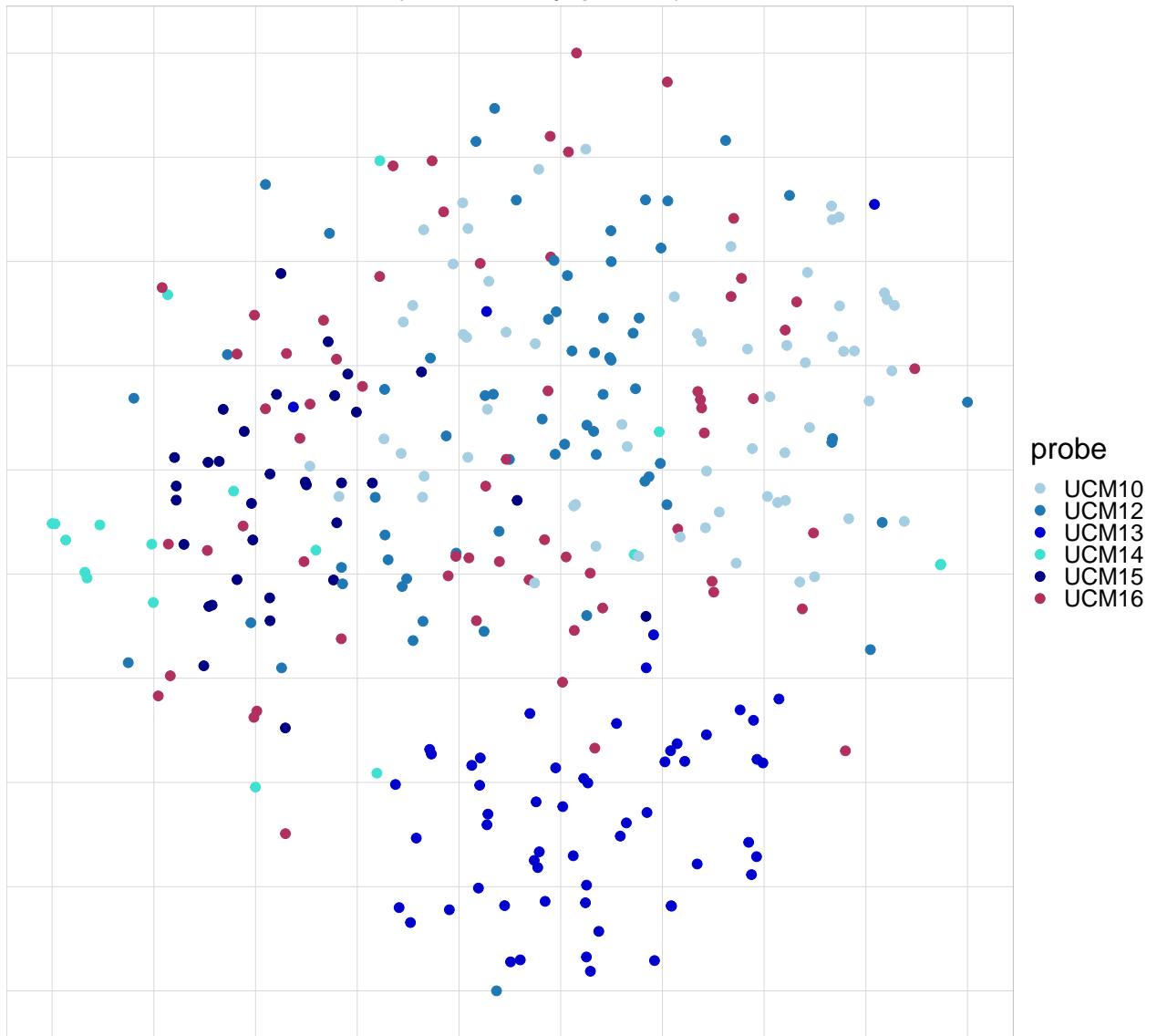
histogram of cumulative expression values per cell



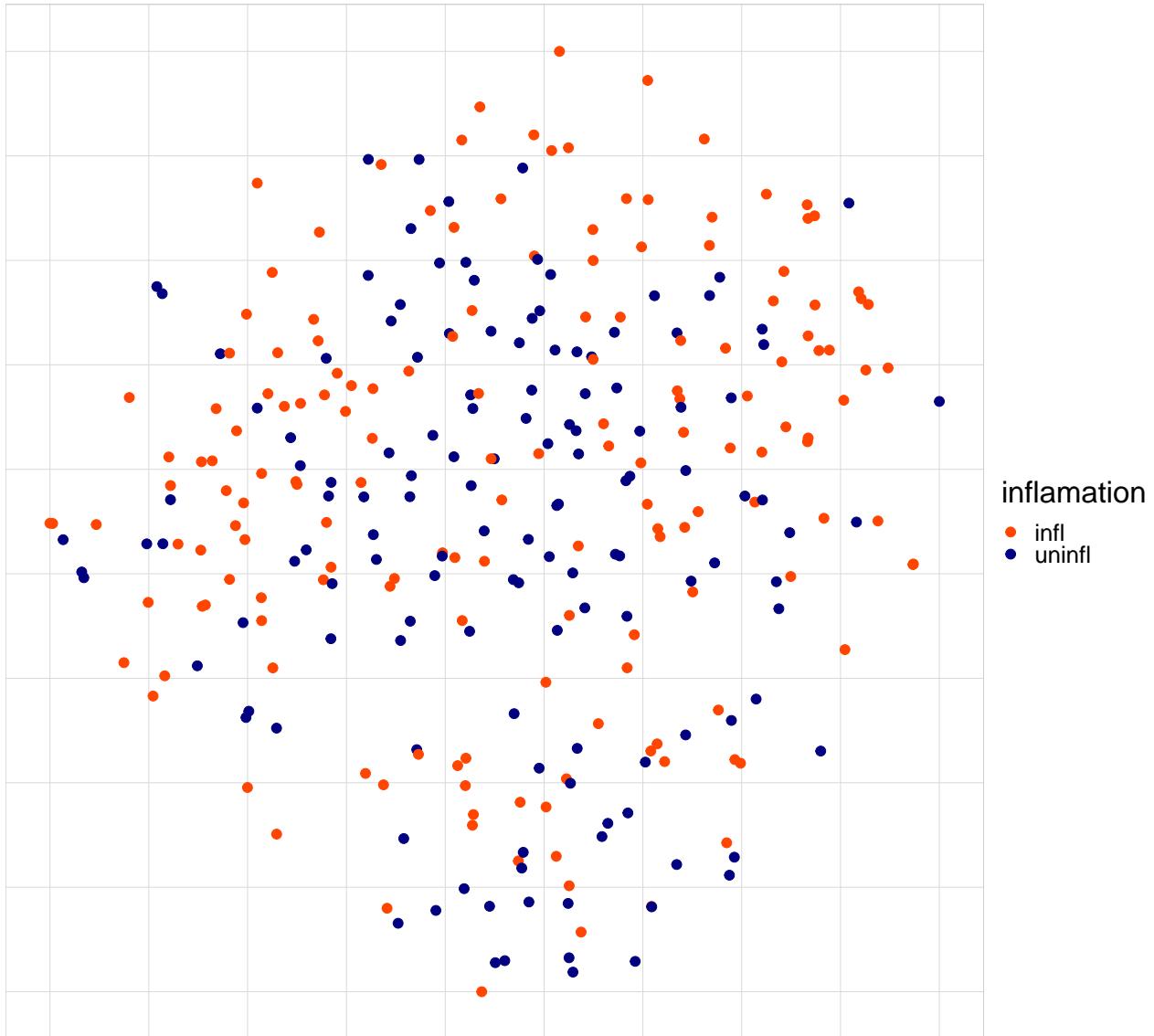
t-SNE between tissues (colored by kmeans.cluster)



t-SNE between tissues (colored by probe)



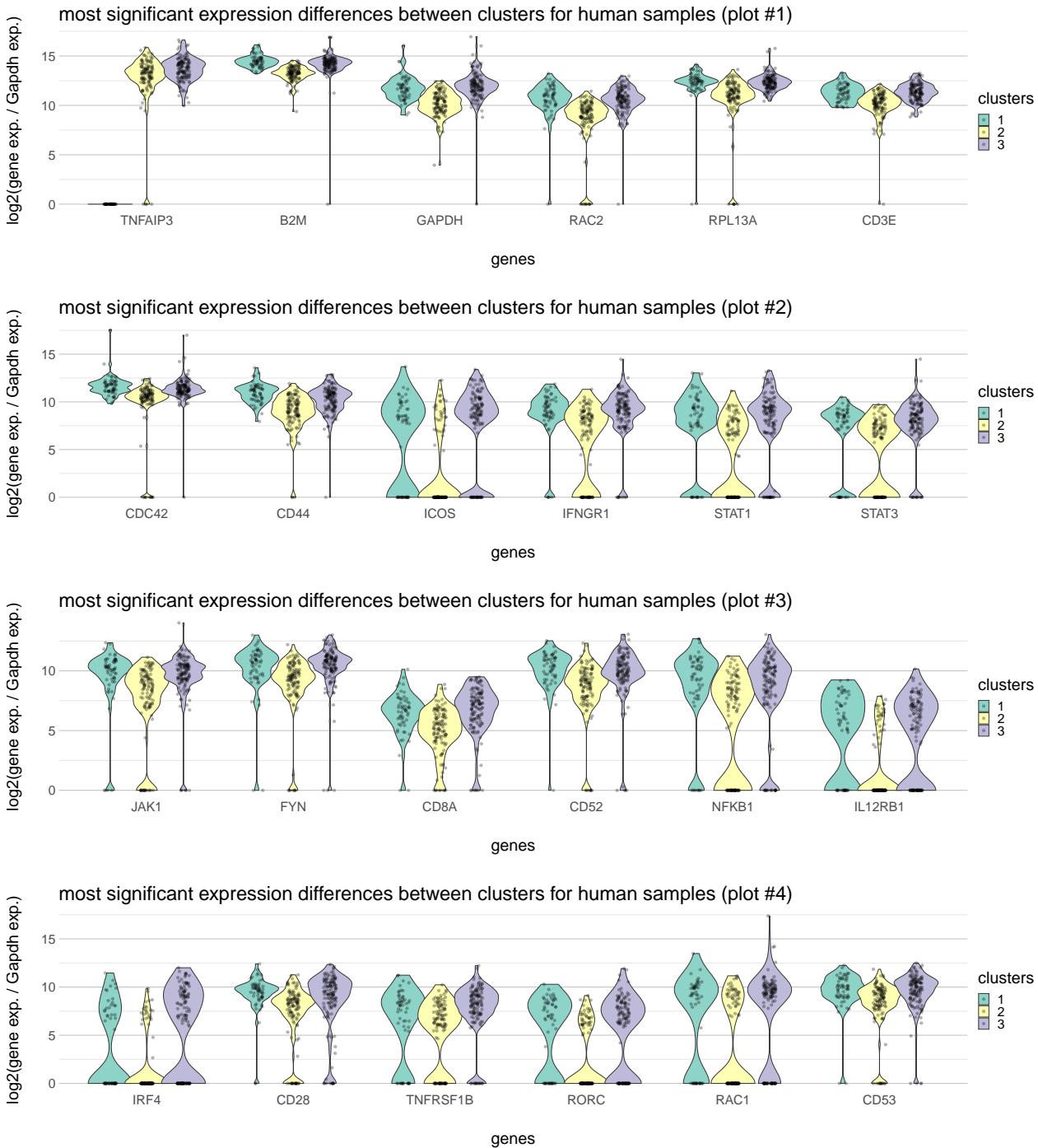
## t-SNE colored by inflamed site

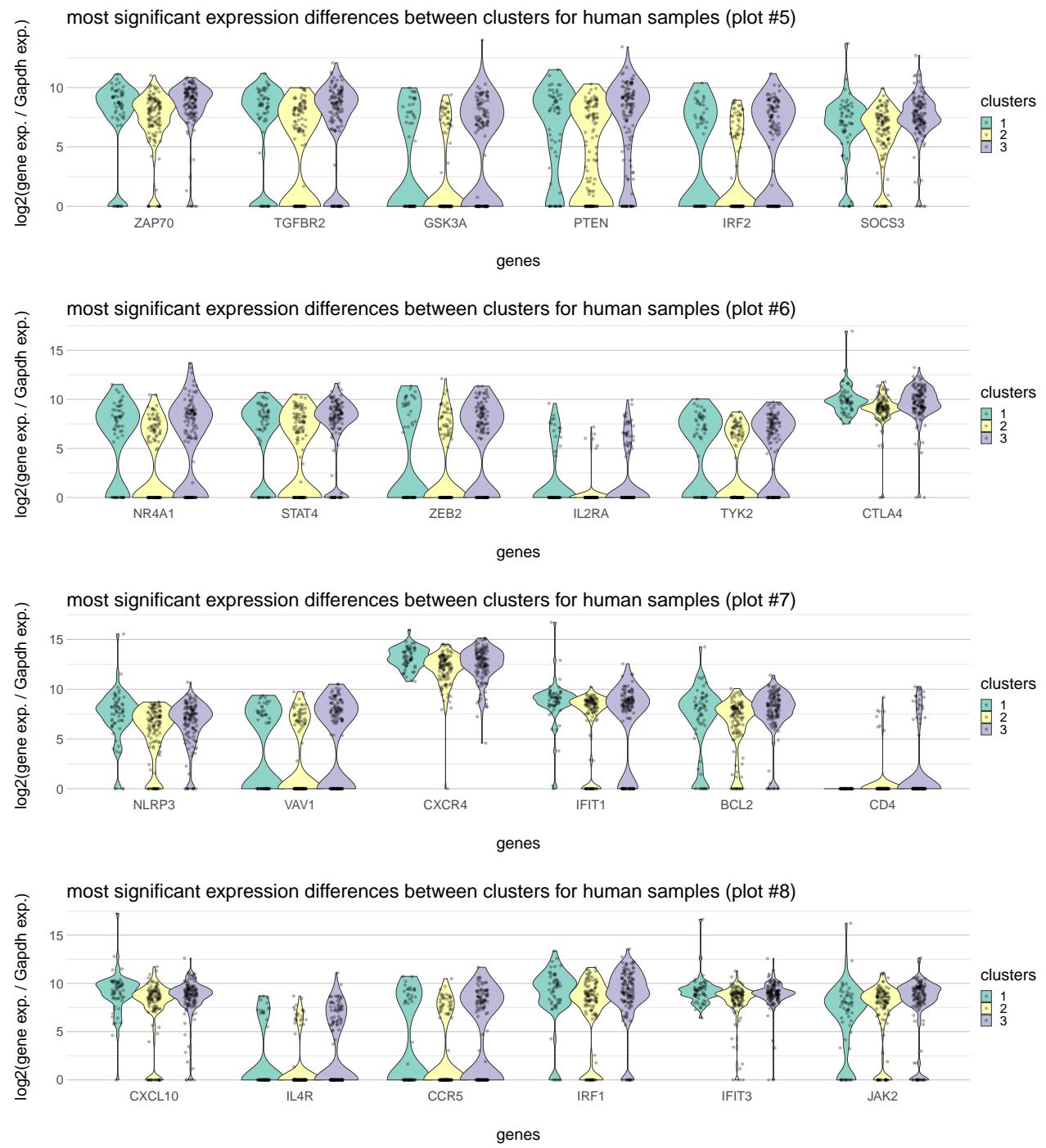


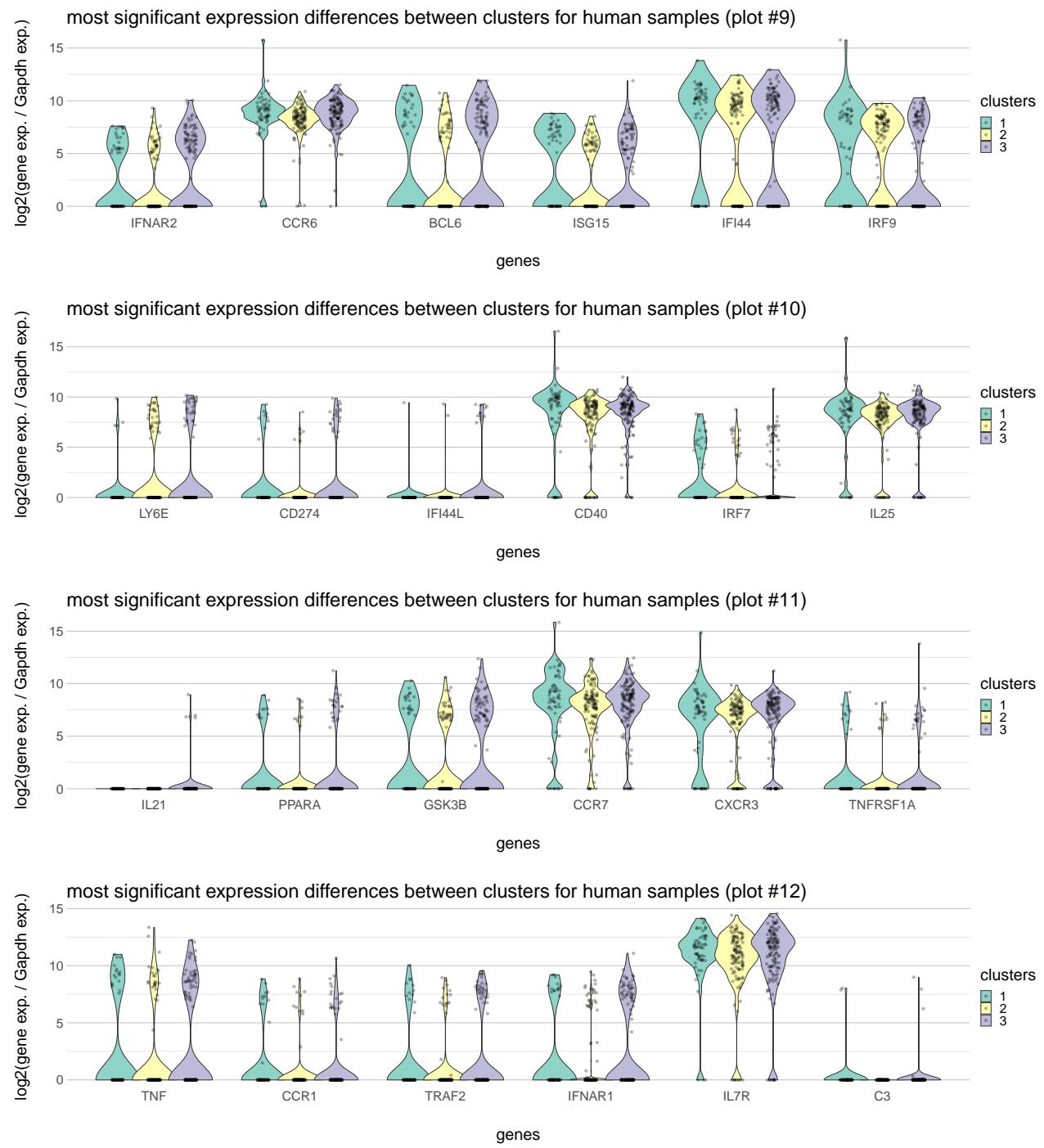
[1] Differentially expressed genes between clusters for human samples:

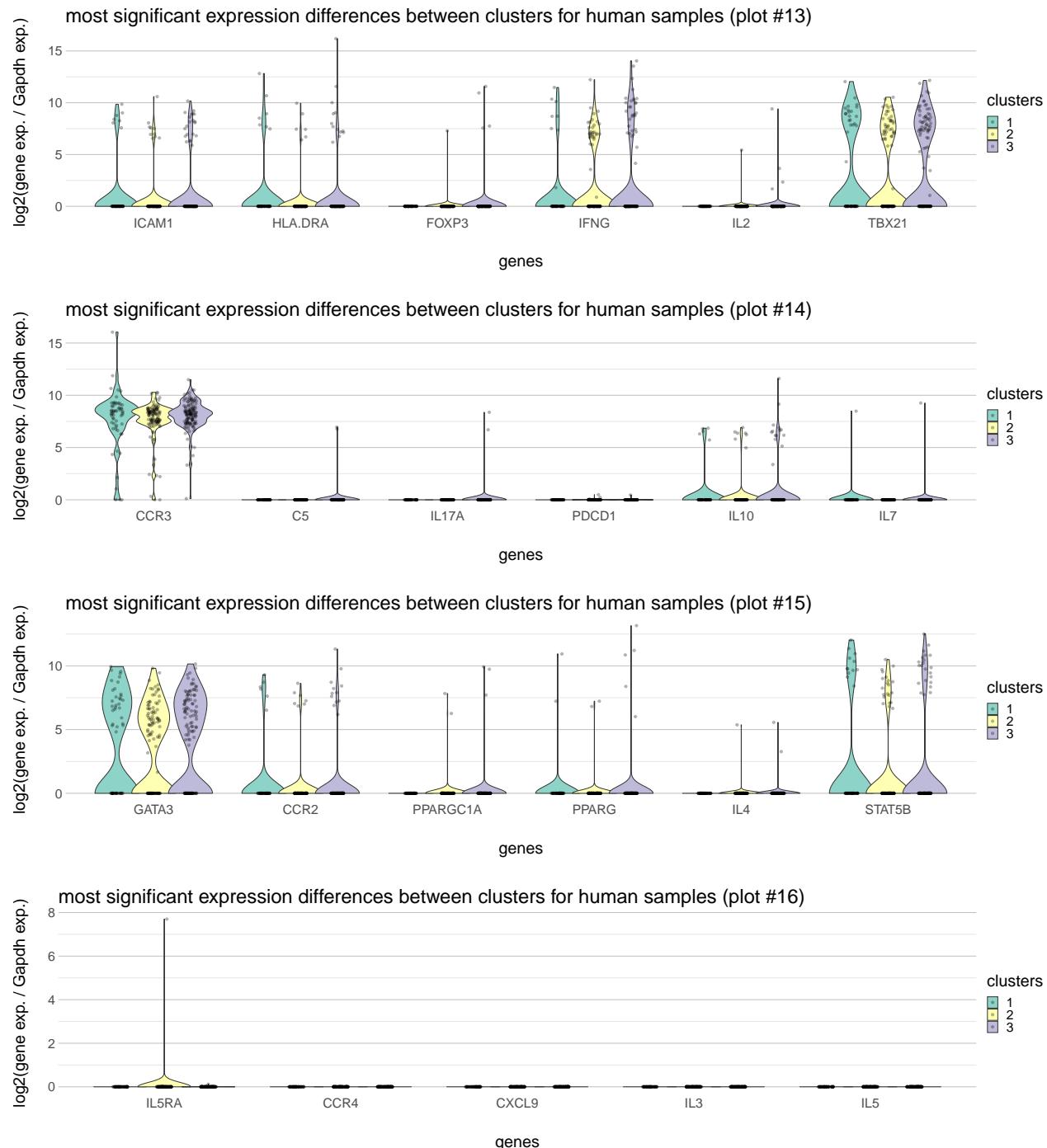
[1]	TNFAIP3: 7.493e-30	B2M: 1.922e-28	GAPDH: 2.393e-22
[4]	RAC2: 3.492e-20	RPL13A: 7.829e-19	CD3E: 2.671e-16
[7]	CDC42: 2.204e-15	CD44: 2.368e-15	ICOS: 1.094e-13
[10]	IFNGR1: 1.273e-13	STAT1: 3.588e-13	STAT3: 5.935e-13
[13]	JAK1: 1.383e-12	FYN: 2.893e-12	CD8A: 9.184e-12
[16]	CD52: 2.294e-11	NFKB1: 5.767e-11	IL12RB1: 1.081e-10
[19]	IRF4: 1.404e-10	CD28: 6.982e-10	TNFRSF1B: 1.938e-09
[22]	RORC: 2.06e-09	RAC1: 3.634e-08	CD53: 4.524e-08
[25]	ZAP70: 4.472e-07	TGFBR2: 6.118e-07	GSK3A: 7.63e-07
[28]	PTEN: 1.036e-06	IRF2: 2.596e-06	SOCS3: 2.596e-06
[31]	NR4A1: 6.545e-06	STAT4: 8.264e-06	ZEB2: 1.198e-05
[34]	IL2RA: 1.397e-05	TYK2: 2.481e-05	CTLA4: 2.505e-05
[37]	NLRP3: 3.563e-05	VAV1: 5.676e-05	CXCR4: 7.587e-05
[40]	IFIT1: 0.0001034	BCL2: 0.0001278	CD4: 0.0001293
[43]	CXCL10: 0.0001745	IL4R: 0.0001794	CCR5: 0.0001794

[46] IRF1: 0.0002988	IFIT3: 0.000363	JAK2: 0.000363
[49] IFNAR2: 0.0005501	CCR6: 0.0005659	BCL6: 0.000603
[52] ISG15: 0.007401	IFI44: 0.009465	IRF9: 0.01785
[55] LY6E: 0.01834	CD274: 0.0196	IFI44L: 0.0196
[58] CD40: 0.0268	IRF7: 0.02968	IL25: 0.02968
[61] IL21: 0.04859		





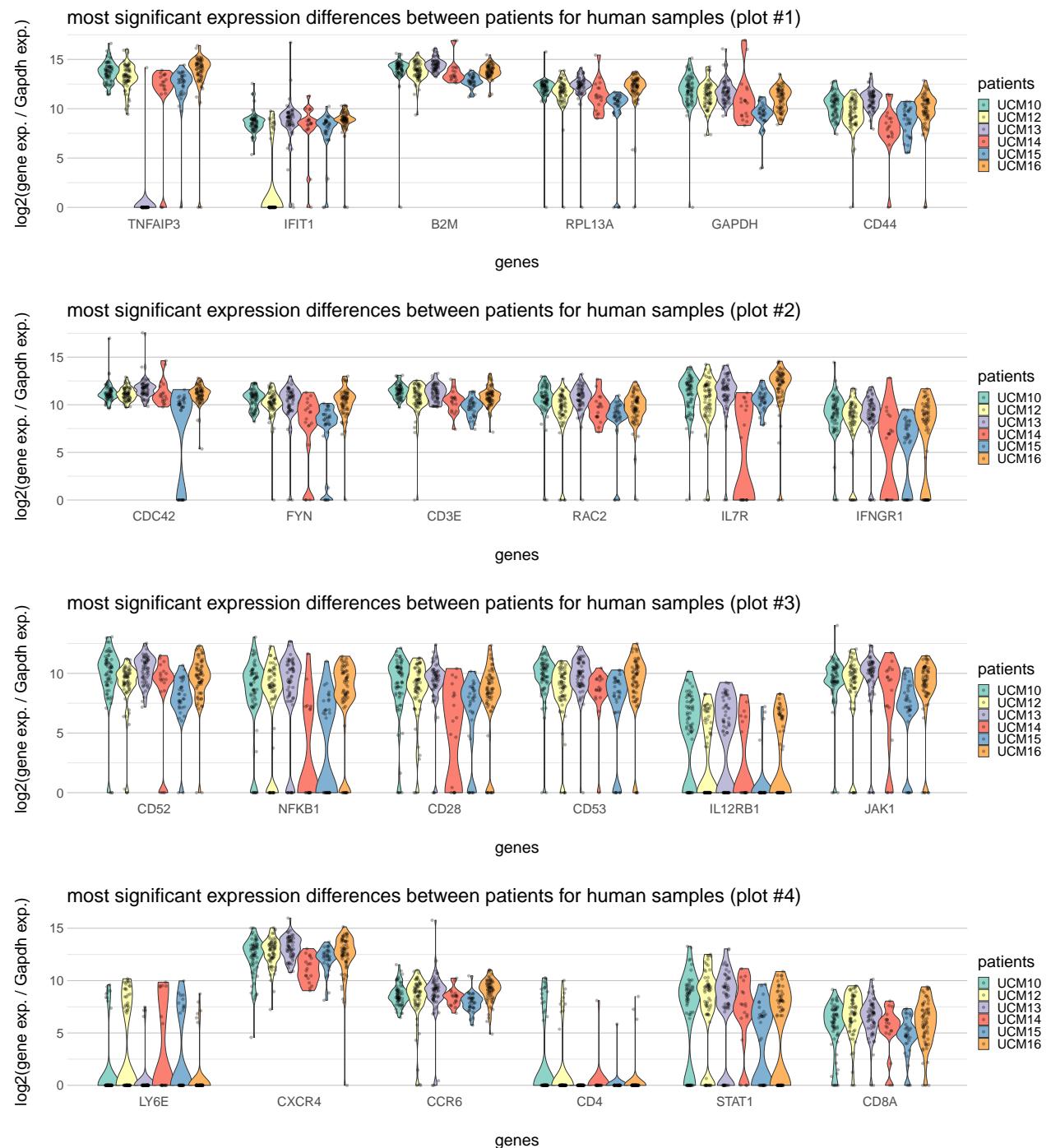


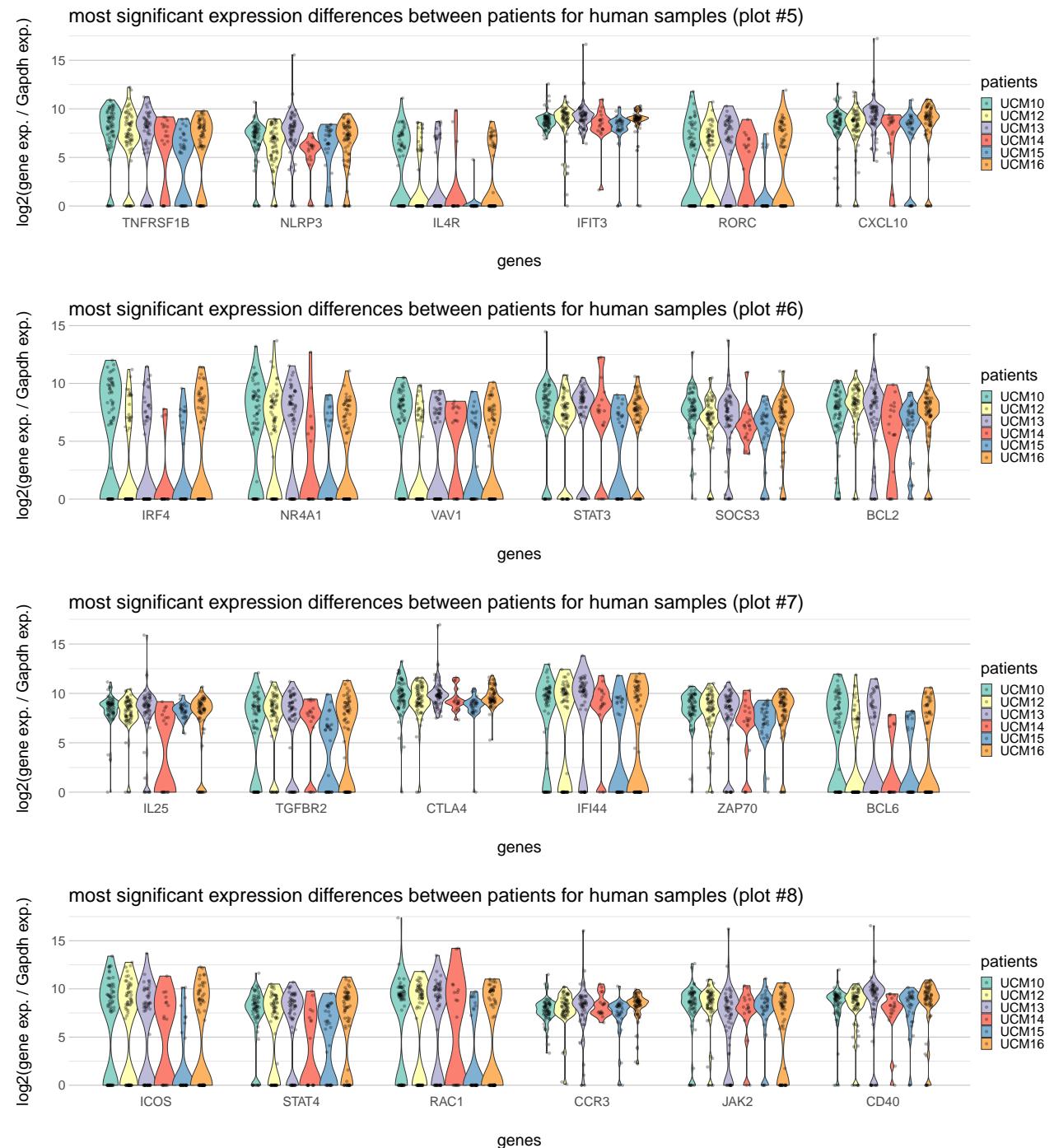


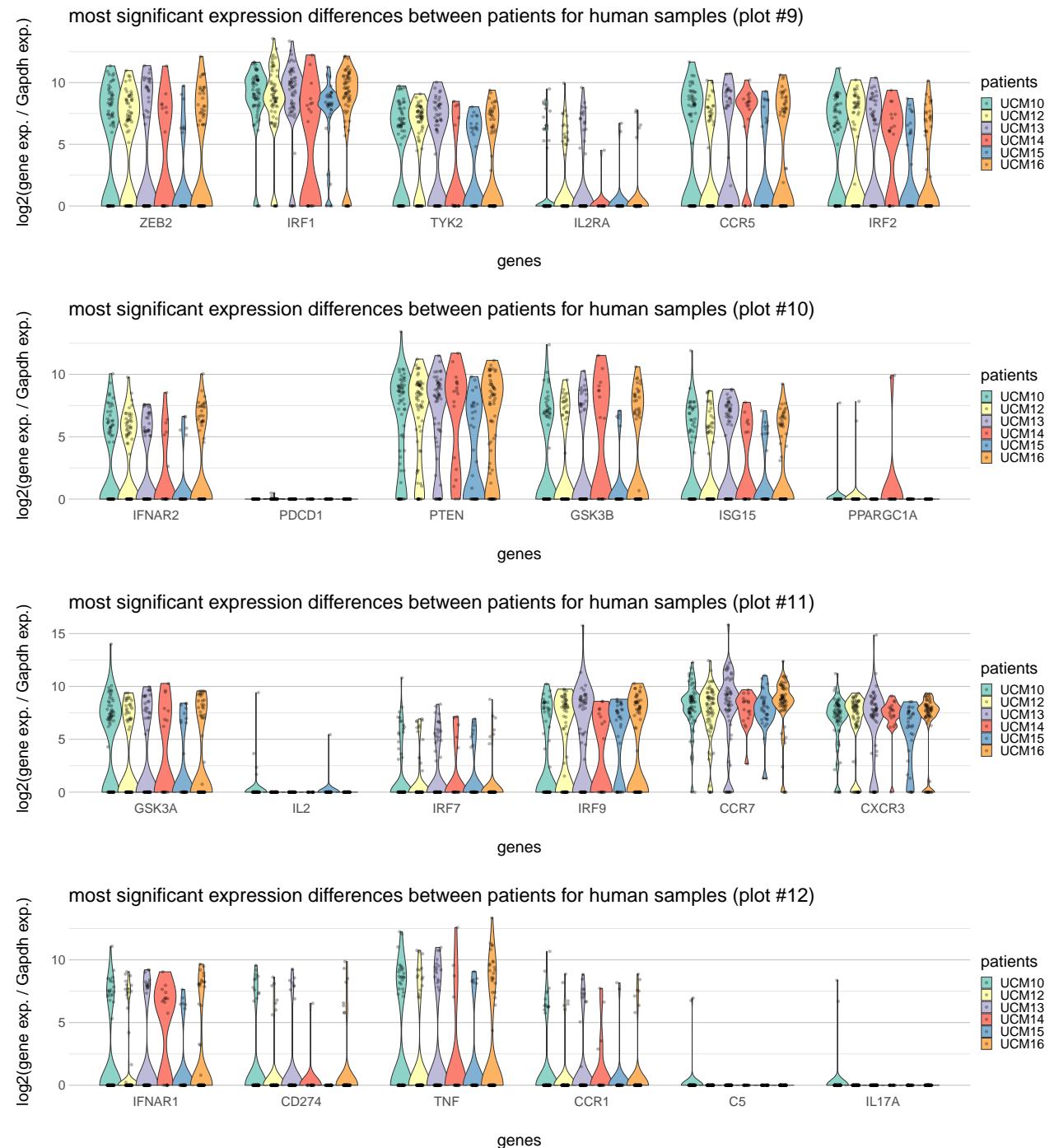
[1] Differentially expressed genes between patients for human samples:

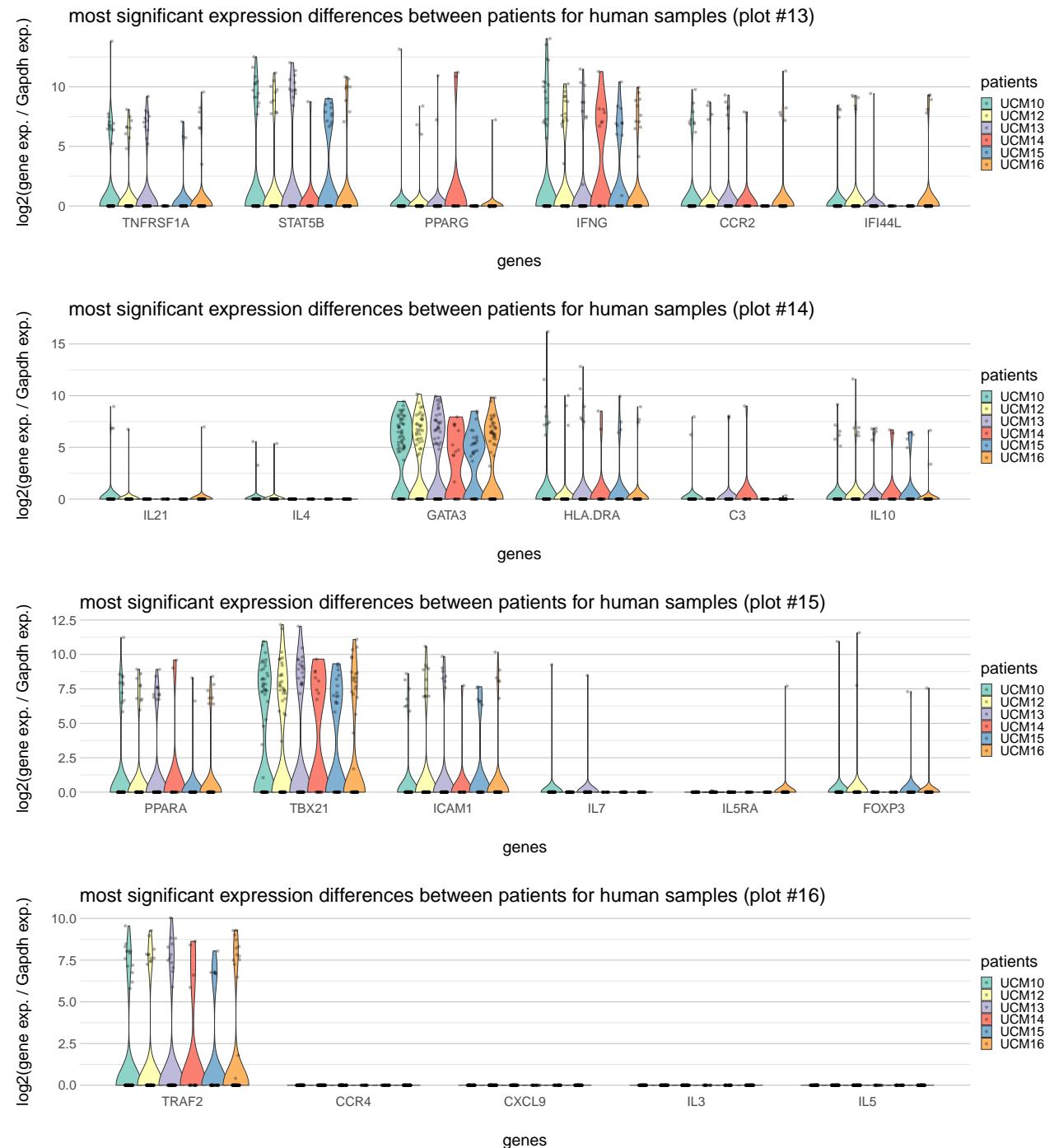
- [1] TNFAIP3: 6.031e-31    IFIT1: 6.036e-21    B2M: 7.663e-17
- [4] RPL13A: 4.09e-14    GAPDH: 1.52e-13    CD44: 2.062e-13
- [7] CDC42: 6.573e-13    FYN: 1.491e-12    CD3E: 2.585e-12
- [10] RAC2: 1.1e-10    IL7R: 1.517e-10    IFNGR1: 4.241e-09
- [13] CD52: 4.241e-09    NFKB1: 4.241e-09    CD28: 6.837e-08
- [16] CD53: 8.731e-08    IL12RB1: 1.693e-07    JAK1: 5.439e-07
- [19] LY6E: 3.547e-06    CXCR4: 5.306e-06    CCR6: 1.208e-05
- [22] CD4: 2.864e-05    STAT1: 3.947e-05    CD8A: 3.947e-05
- [25] TNFRSF1B: 4.055e-05    NLRP3: 4.055e-05    IL4R: 5.9e-05

[28]	IFIT3:	6.364e-05	RORC:	9.568e-05	CXCL10:	0.0001028
[31]	IRF4:	0.0001141	NR4A1:	0.0001159	VAV1:	0.0001639
[34]	STAT3:	0.0002365	SOCS3:	0.0003253	BCL2:	0.0003749
[37]	IL25:	0.0003788	TGFBR2:	0.0003886	CTLA4:	0.0003886
[40]	IFI44:	0.0005842	ZAP70:	0.0008335	BCL6:	0.0008335
[43]	ICOS:	0.001032	STAT4:	0.001206	RAC1:	0.001364
[46]	CCR3:	0.003094	JAK2:	0.004064	CD40:	0.004455
[49]	ZEB2:	0.004502	IRF1:	0.0051	TYK2:	0.005103
[52]	IL2RA:	0.005199	CCR5:	0.006193	IRF2:	0.01151
[55]	IFNAR2:	0.01638	PDCD1:	0.0193	PTEN:	0.02186
[58]	GSK3B:	0.02195	ISG15:	0.0222	PPARGC1A:	0.0301
[61]	GSK3A:	0.04868				









[1] Differentially expressed genes between tissues for human samples:  
[1] IRF4: 0.1827

