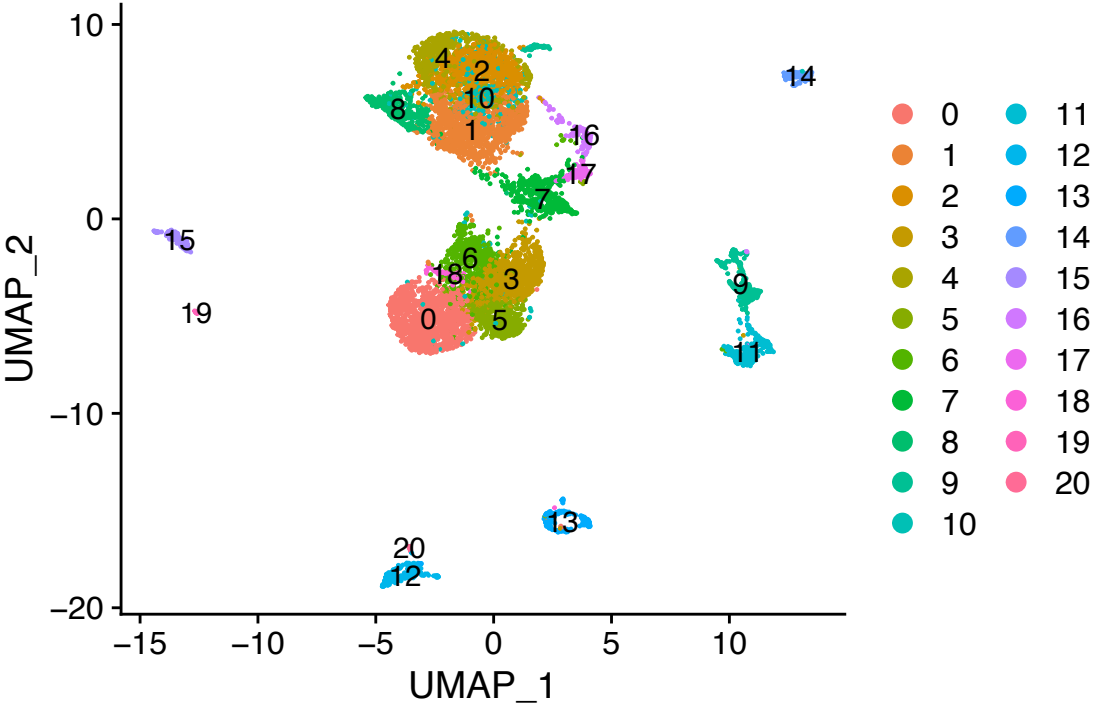
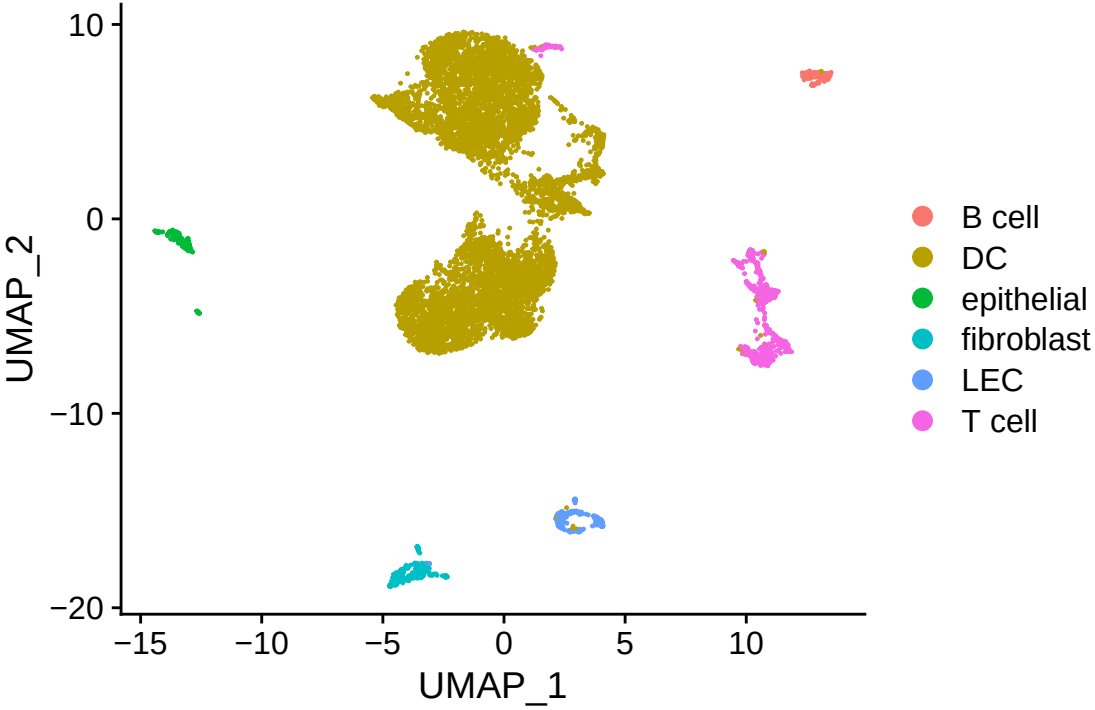
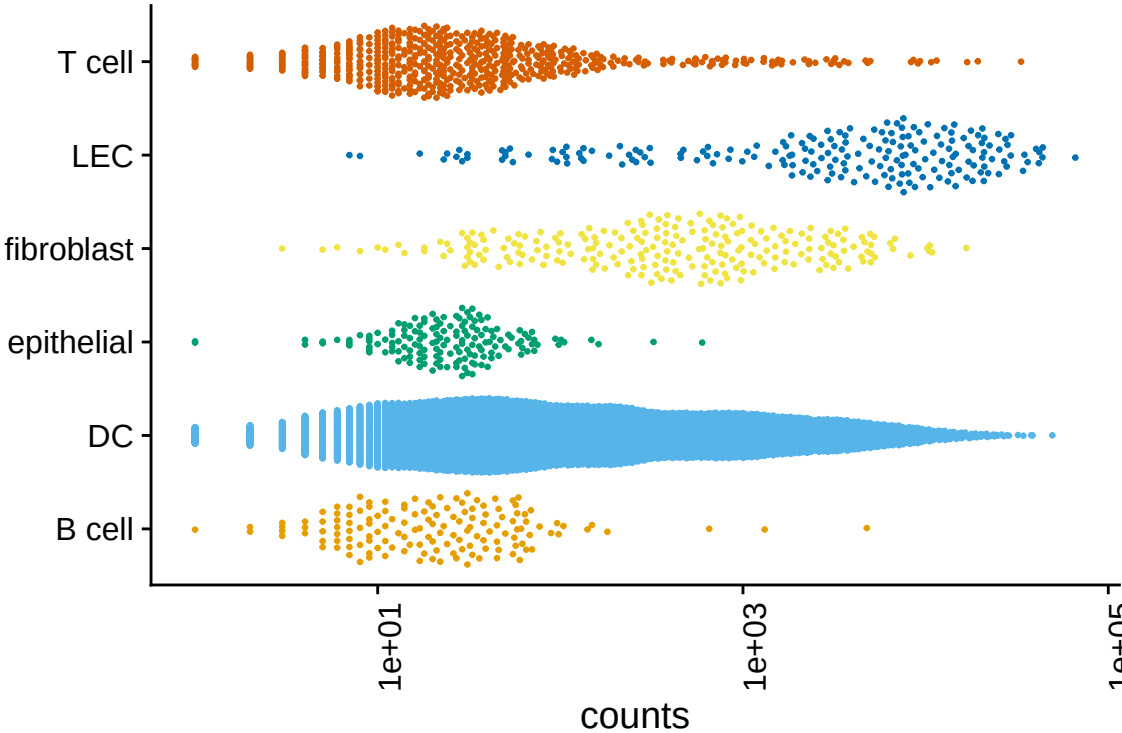
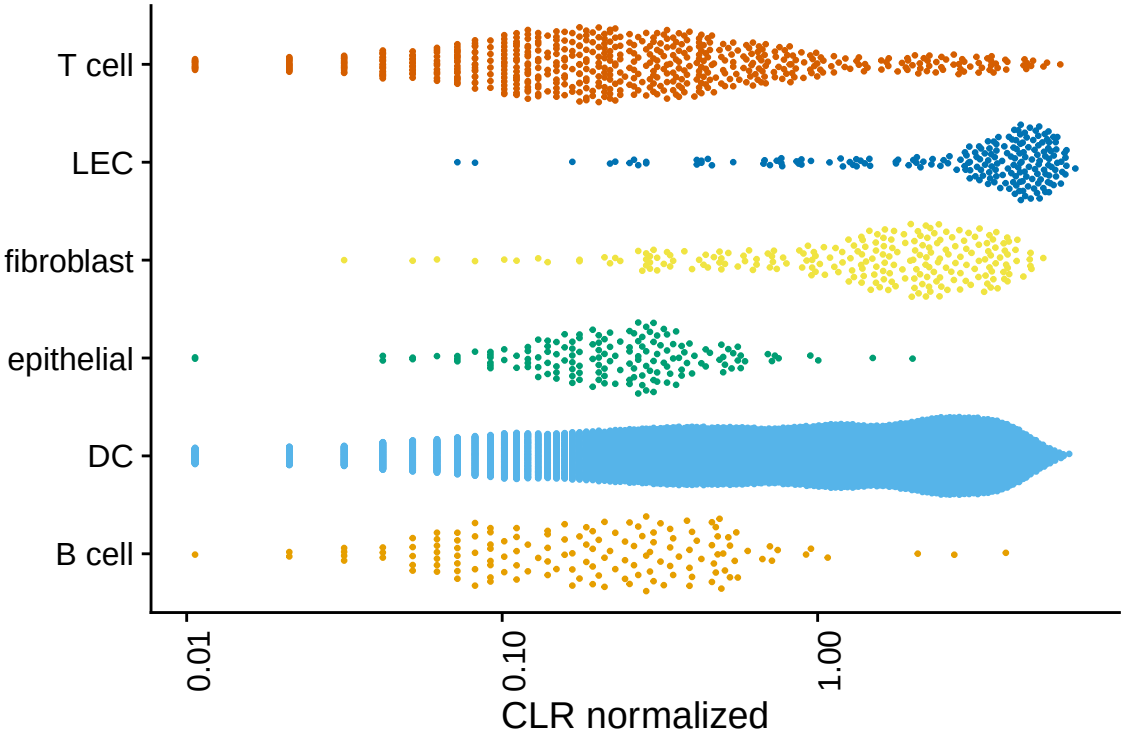
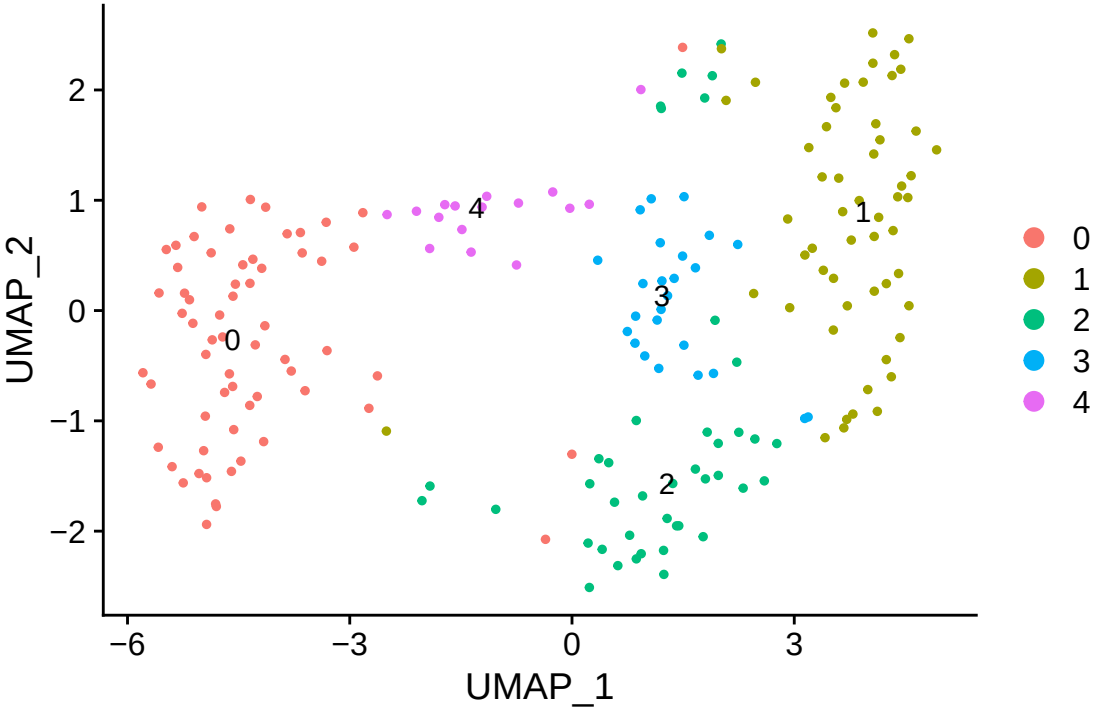
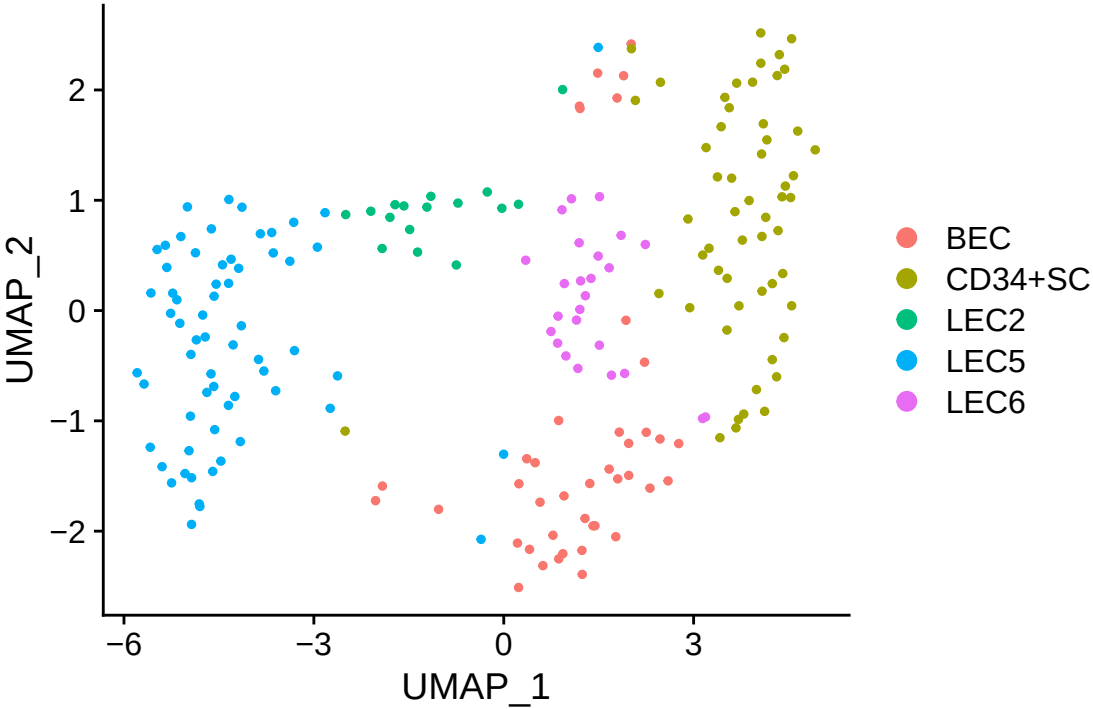

UMAP_2
UMAP_1
10
0
−10
−20
−15
−10
−5
0
5
10
4
2
10
8
1
14
16
17
7
15
6
18
3
9
19
0
5
11
13
20
12
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

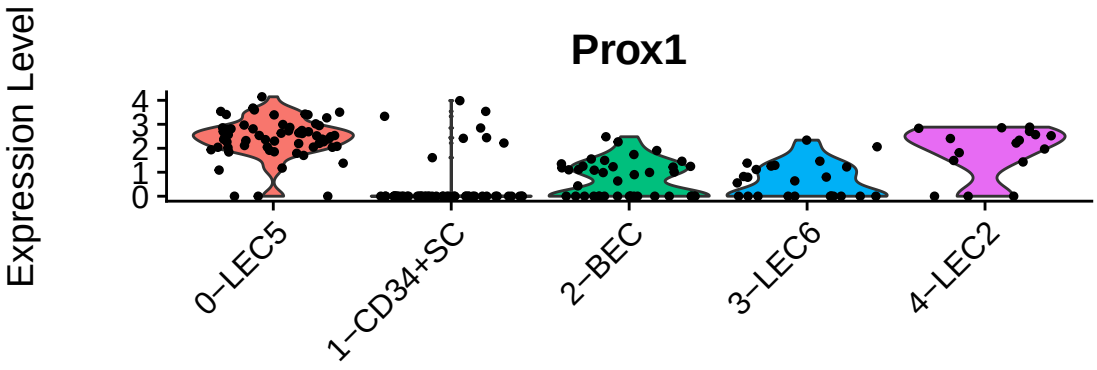

10
0
−10
−20
UMAP_2
−15
−10
−5
0
5
10
UMAP_1
B cell
DC
epithelial
fibroblast
LEC
T cell

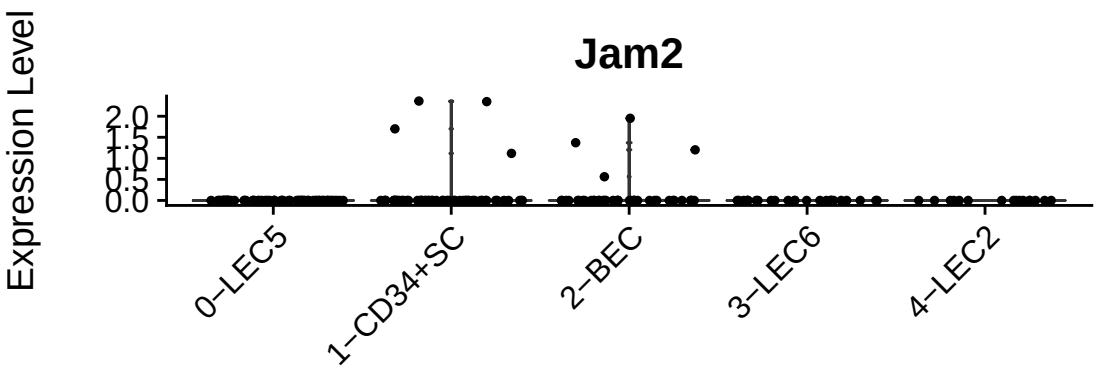

T cell
LEC
fibroblast
epithelial
DC
B cell
1e+01
1e+03
1e+05
counts

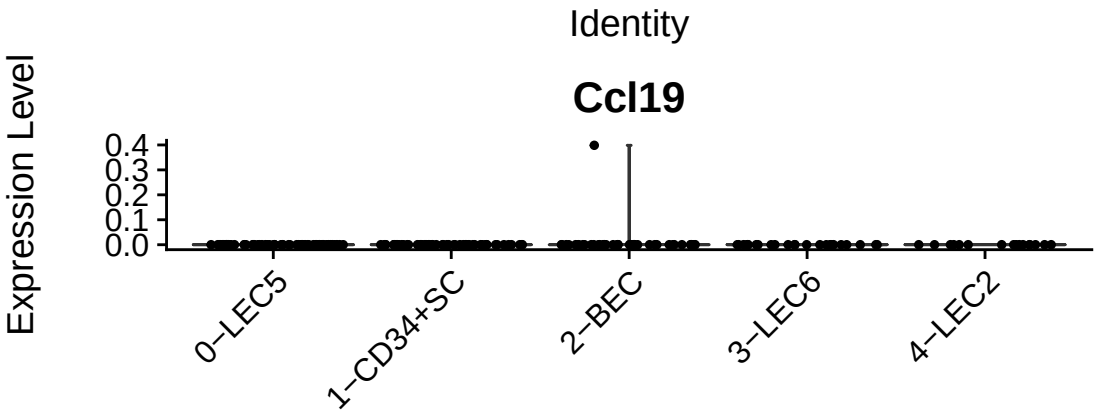

T cell
LEC
fibroblast
epithelial
DC
B cell
0.01
0.10
1.00
CLR normalized

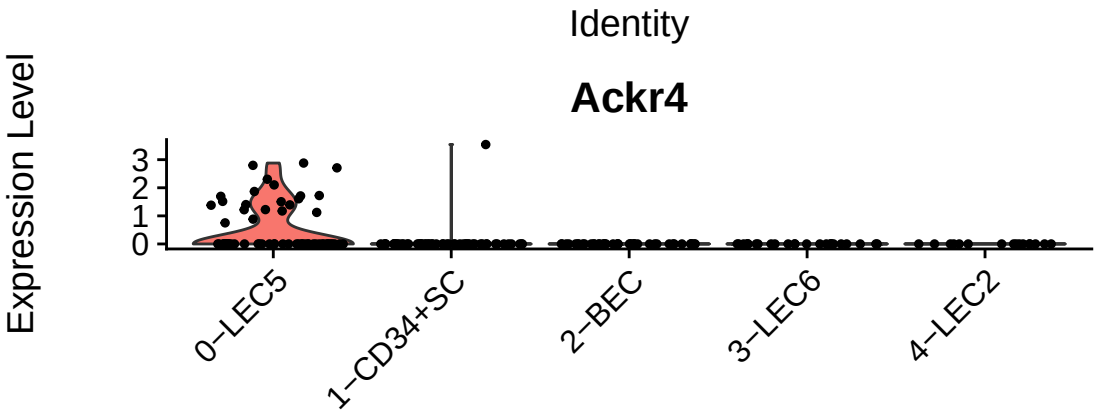

UMAP_2
UMAP_1
2
1
0
−1
−2
−6
−3
0
3
0
1
2
3
4

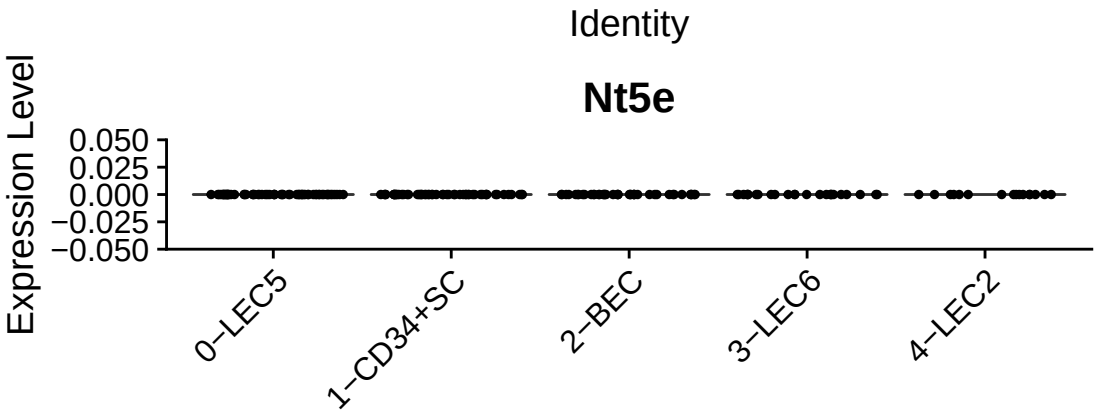

UMAP_2
2
1
0
−1
−2
−6
−3
0
3
UMAP_1
BEC
CD34+SC
LEC2
LEC5
LEC6

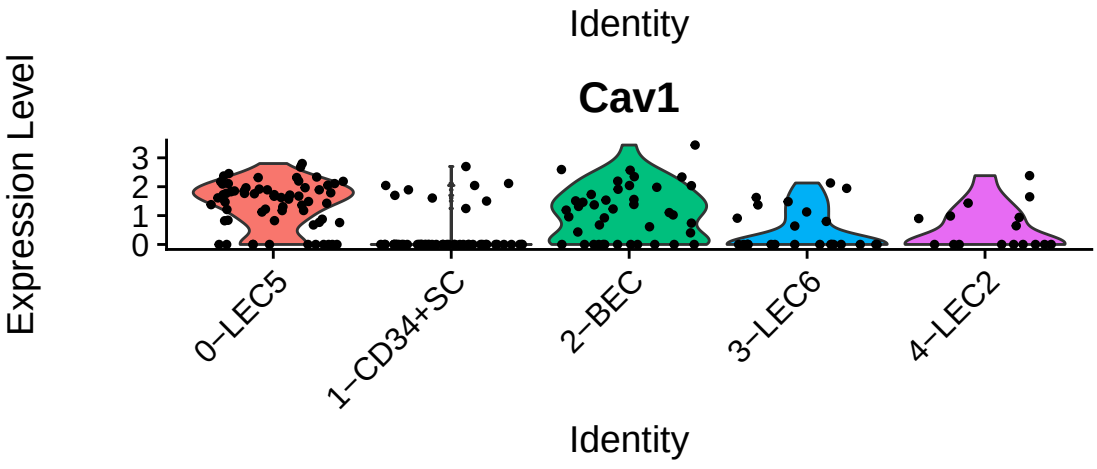

Prox1
Expression Level
4
3
2
1
0
0−LEC5
1−CD34+SC
2−BEC
3−LEC6
4−LEC2
Identity

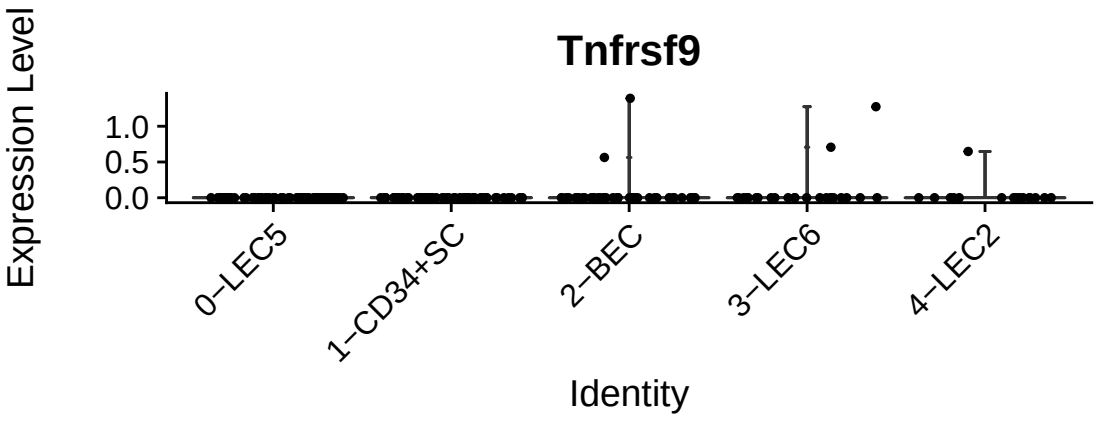

Jam2
Expression Level
2.0
1.5
1.0
0.5
0.0
0−LEC5
1−CD34+SC
2−BEC
3−LEC6
4−LEC2
Identity

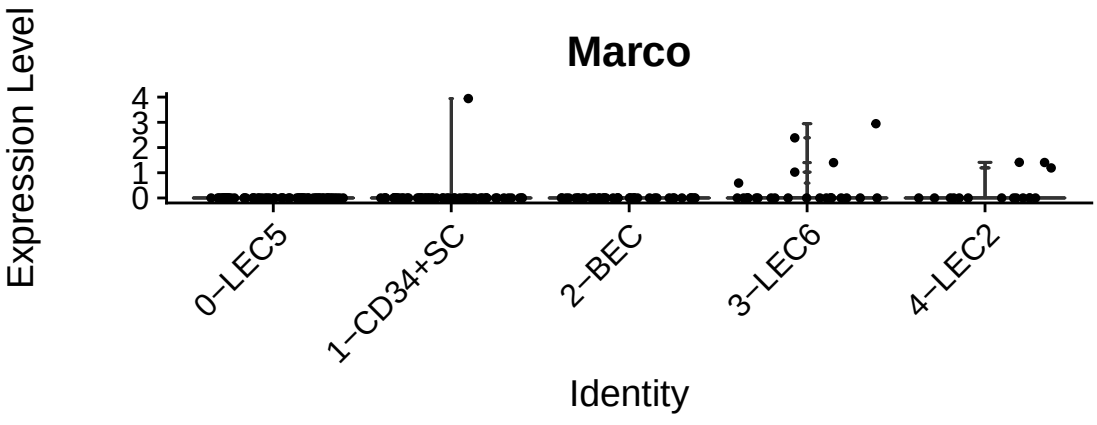

Ccl19
Expression Level
0.4
0.3
0.2
0.1
0.0
0−LEC5
1−CD34+SC
2−BEC
3−LEC6
4−LEC2
Identity

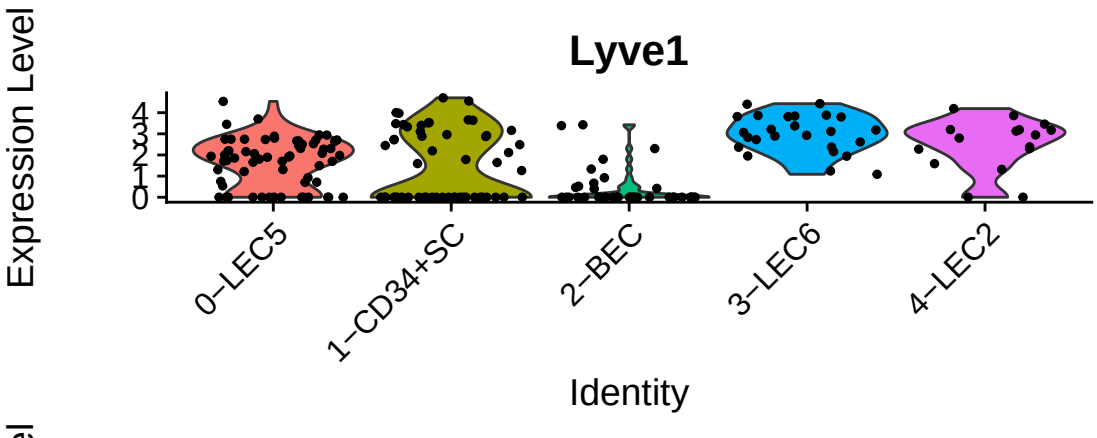

Ackr4
Expression Level
3
2
1
0
0−LEC5
1−CD34+SC
2−BEC
3−LEC6
4−LEC2
Identity

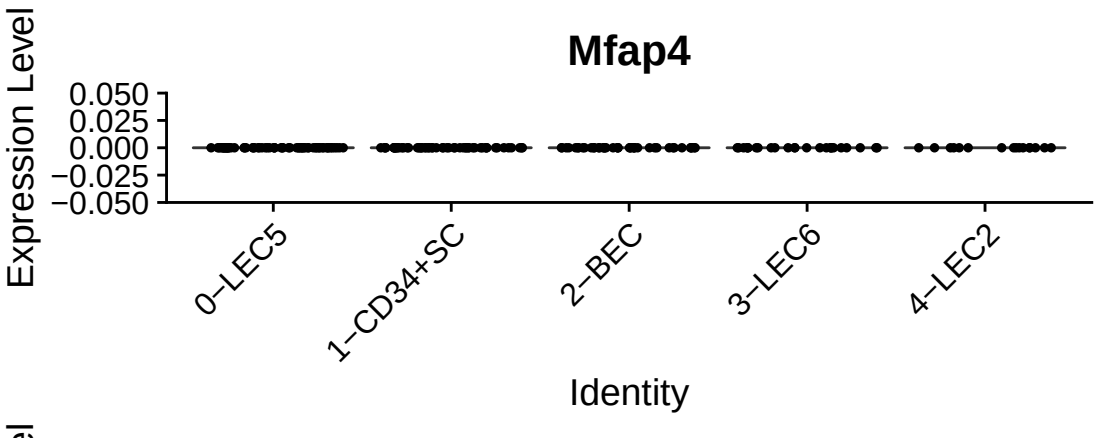

Nt5e
Expression Level
0.050
0.025
0.000
−0.025
−0.050
0−LEC5
1−CD34+SC
2−BEC
3−LEC6
4−LEC2
Identity

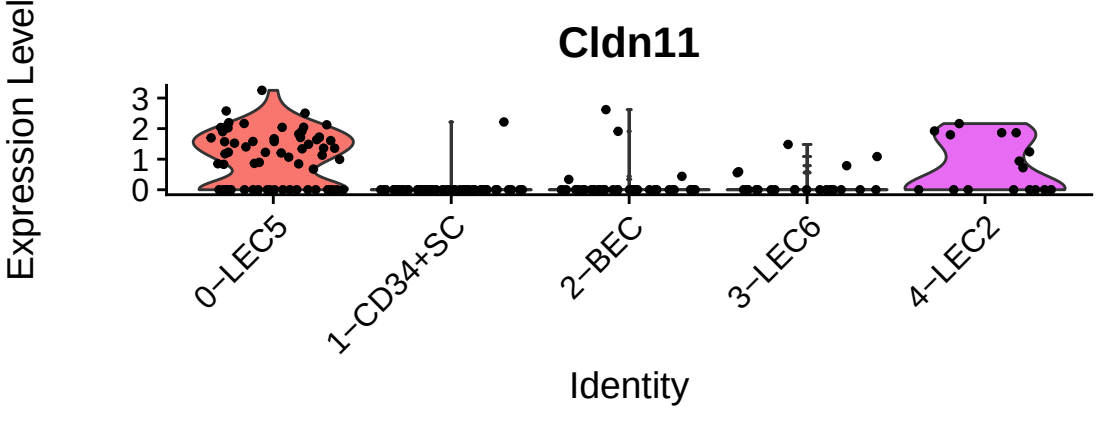

Cav1
Expression Level
3
2
1
0
0−LEC5
1−CD34+SC
2−BEC
3−LEC6
4−LEC2
Identity

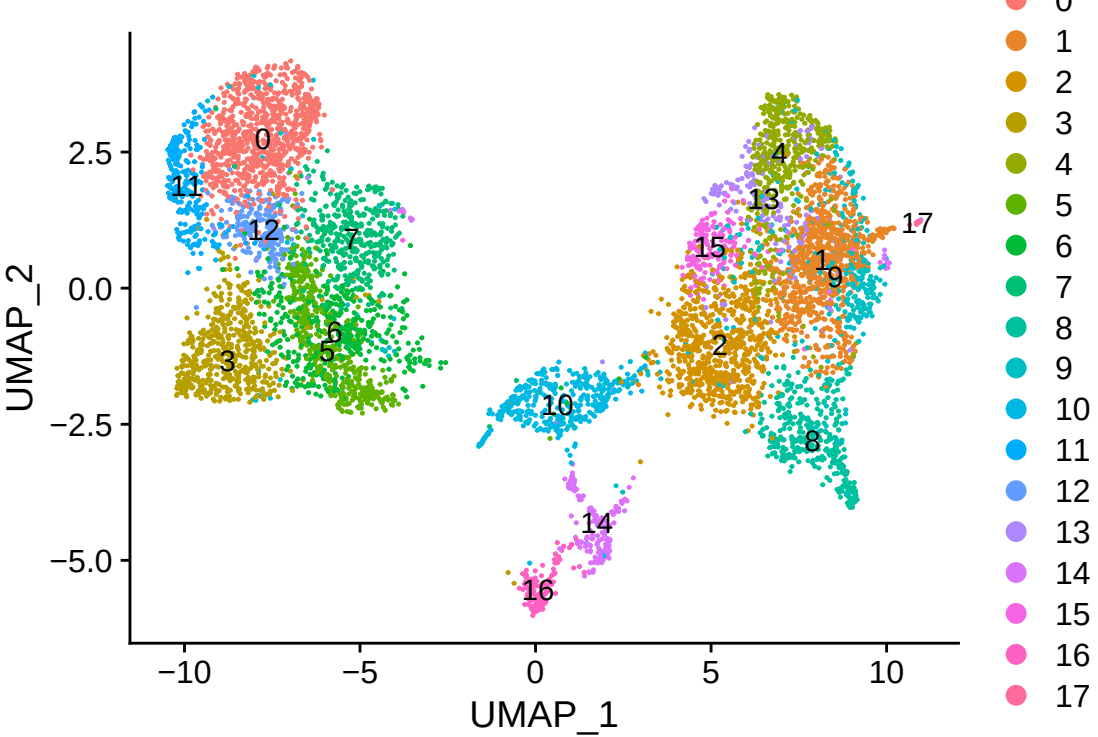

Tnfrsf9
Expression Level
1.0
0.5
0.0
0−LEC5
1−CD34+SC
2−BEC
3−LEC6
4−LEC2
Identity

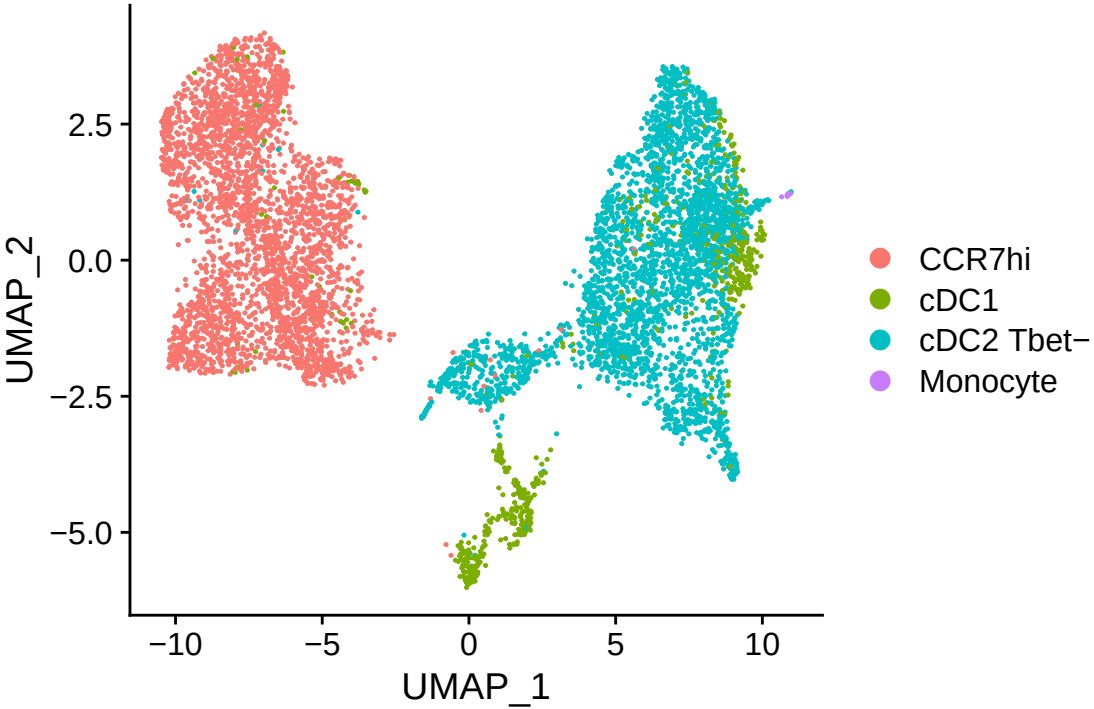

Marco
Expression Level
4
3
2
1
0
0−LEC5
1−CD34+SC
2−BEC
3−LEC6
4−LEC2
Identity

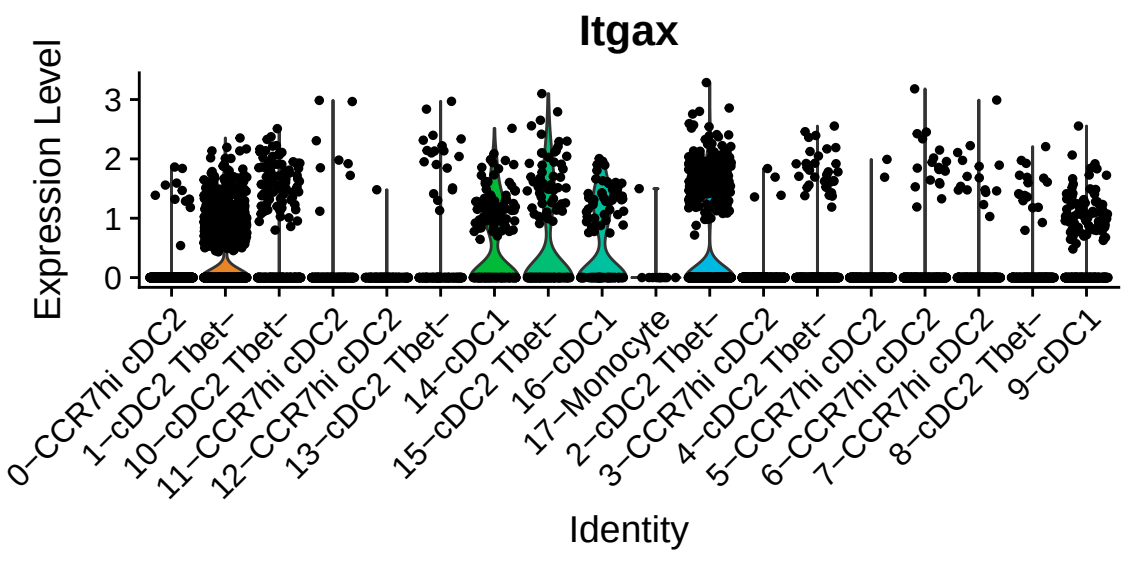

Lyve1
Expression Level
4
3
2
1
0
0−LEC5
1−CD34+SC
2−BEC
3−LEC6
4−LEC2
Identity

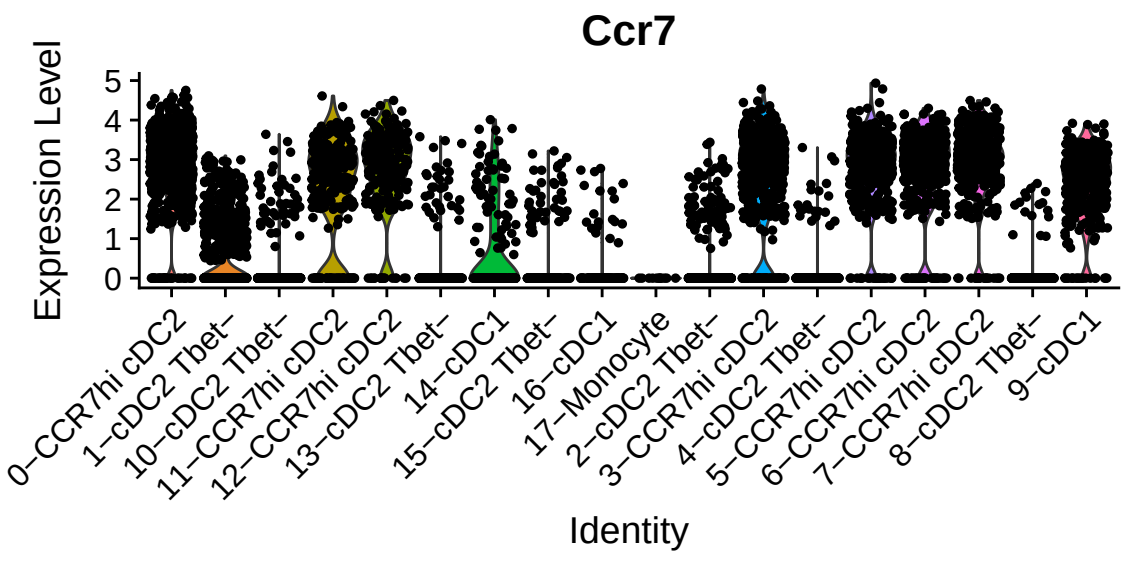

Mfap4
Expression Level
0.050
0.025
0.000
−0.025
−0.050
0−LEC5
1−CD34+SC
2−BEC
3−LEC6
4−LEC2
Identity

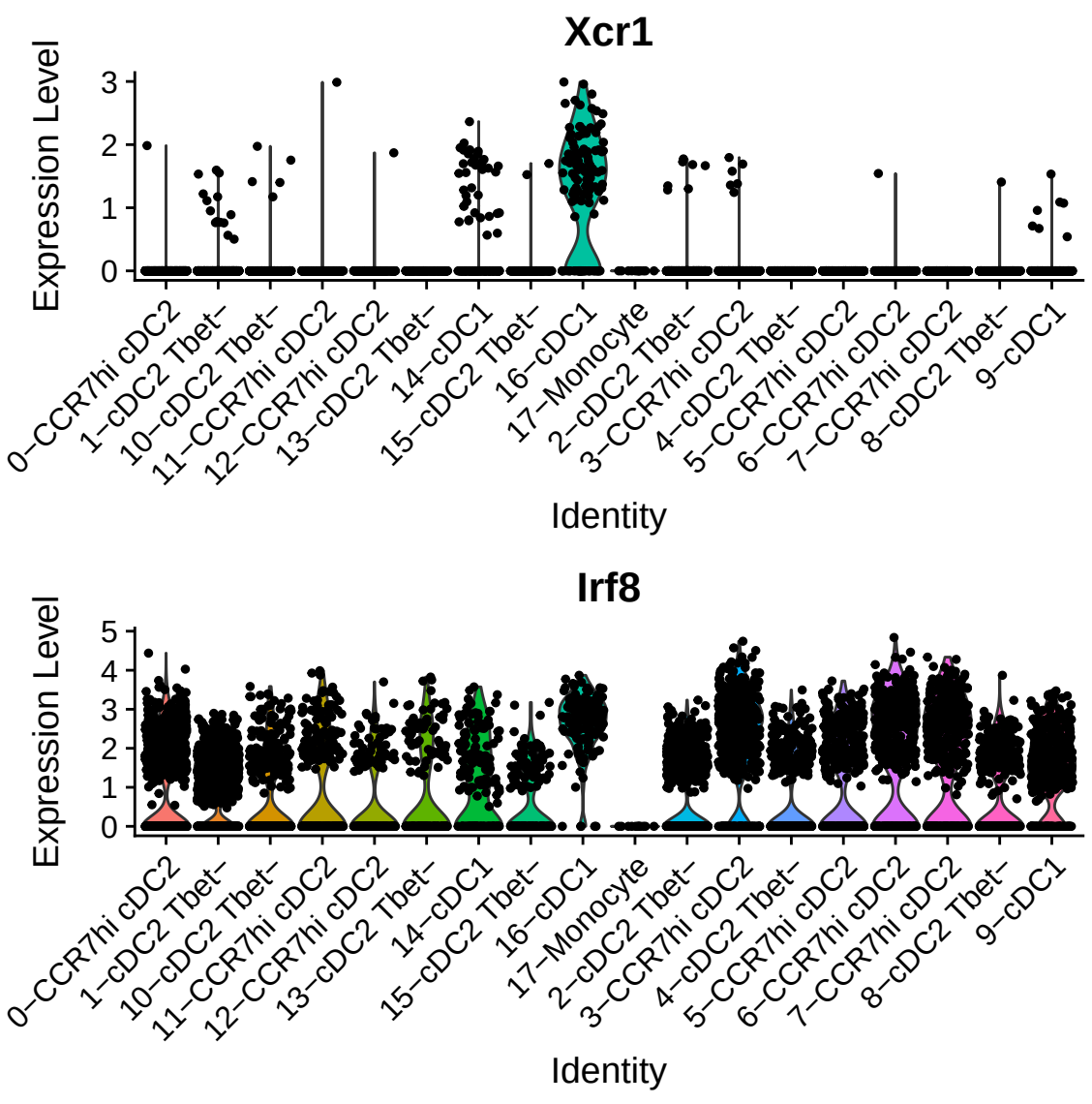

Cldn11
Expression Level
3
2
1
0
0−LEC5
1−CD34+SC
2−BEC
3−LEC6
4−LEC2
Identity


UMAP_2
UMAP_1
2.5
0.0
−2.5
−5.0
−10
−5
0
5
10
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

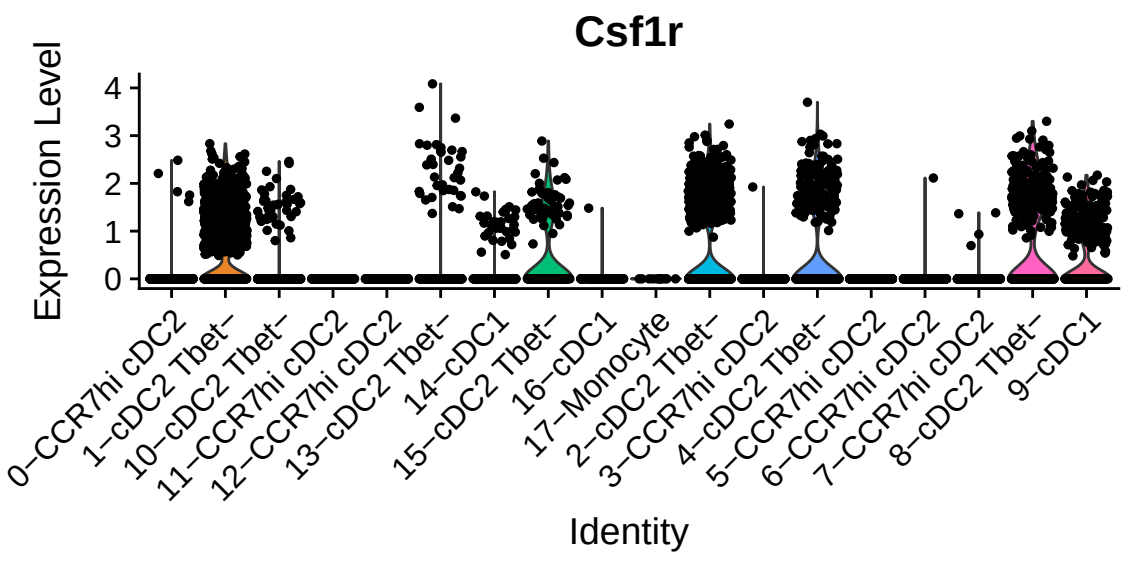

2.5
0.0
−2.5
−5.0
UMAP_2
−10
−5
0
5
10
UMAP_1
CCR7hi
cDC1
cDC2 Tbet−
Monocyte

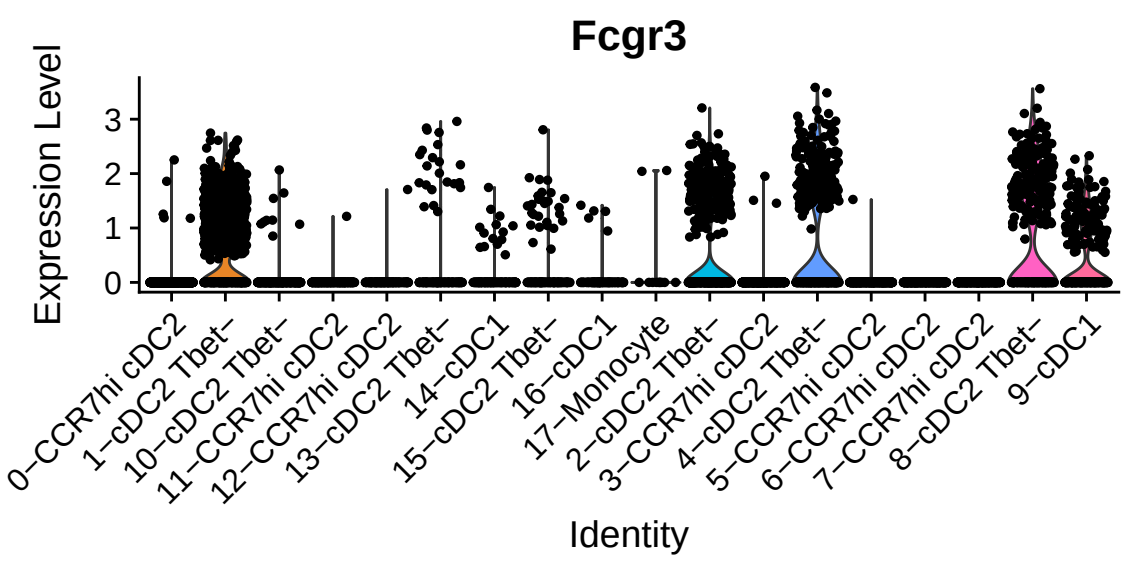

Itgax
Expression Level
Identity

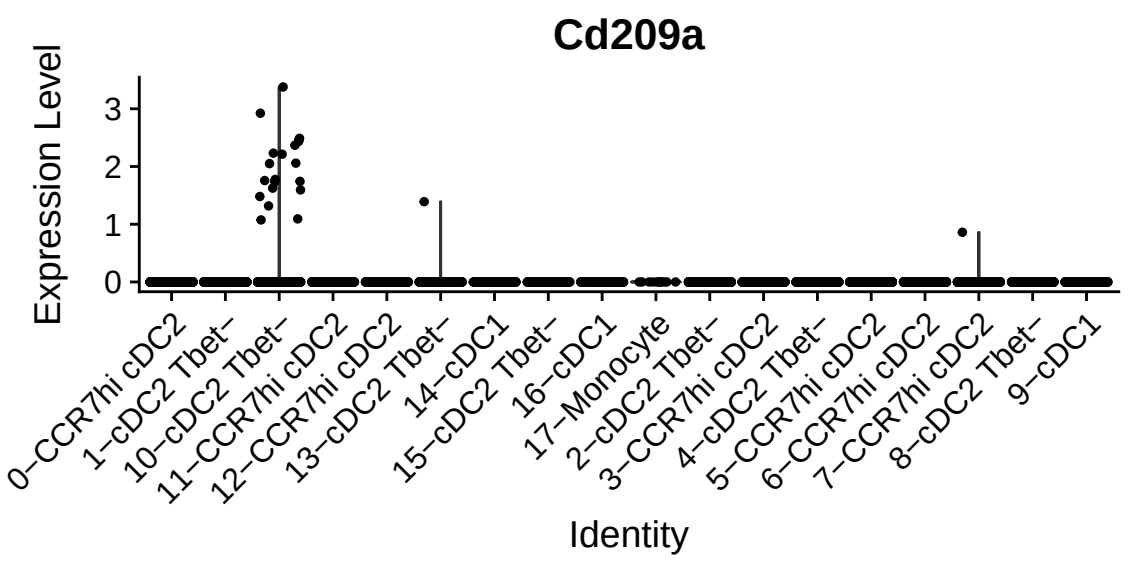

Ccr7
Expression Level
Identity

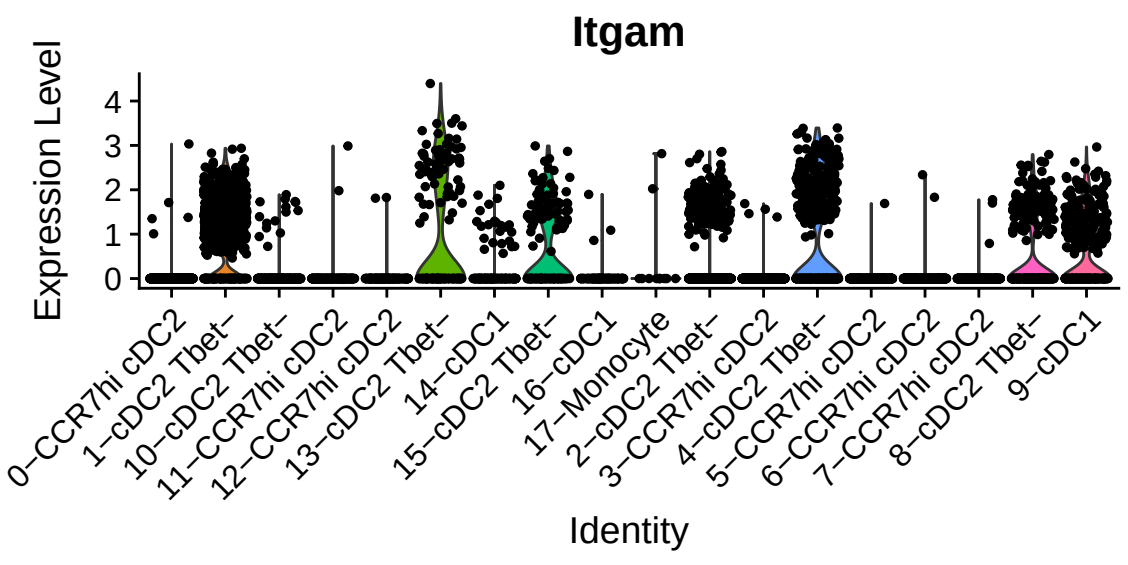

Xcr1
Expression Level
Identity

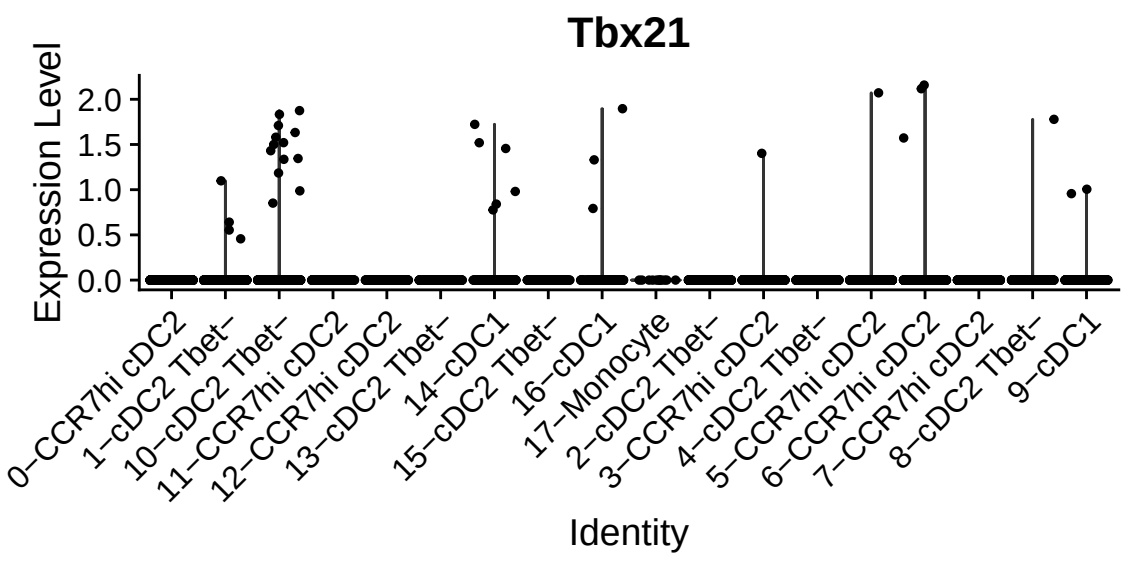
Irf8
Expression Level
Identity

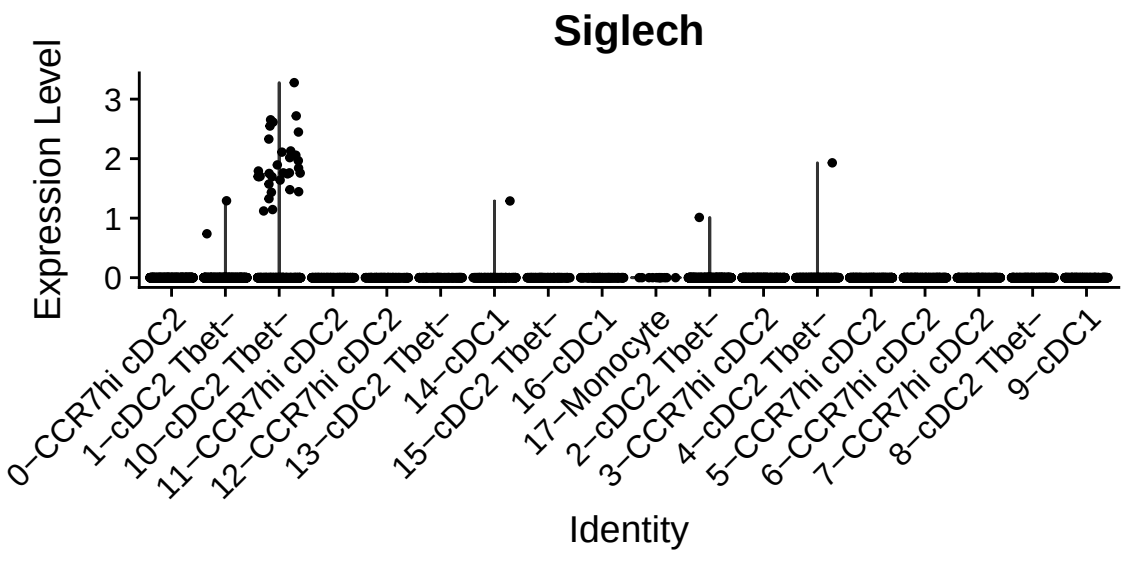

Csf1r
Expression Level
Identity

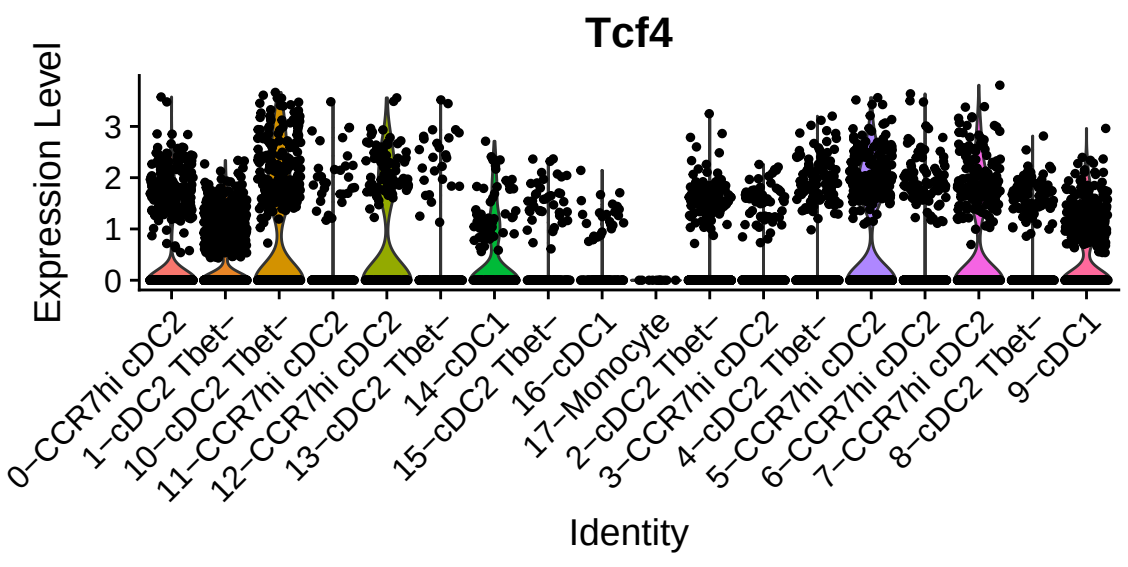

Fcgr3
Expression Level
Identity

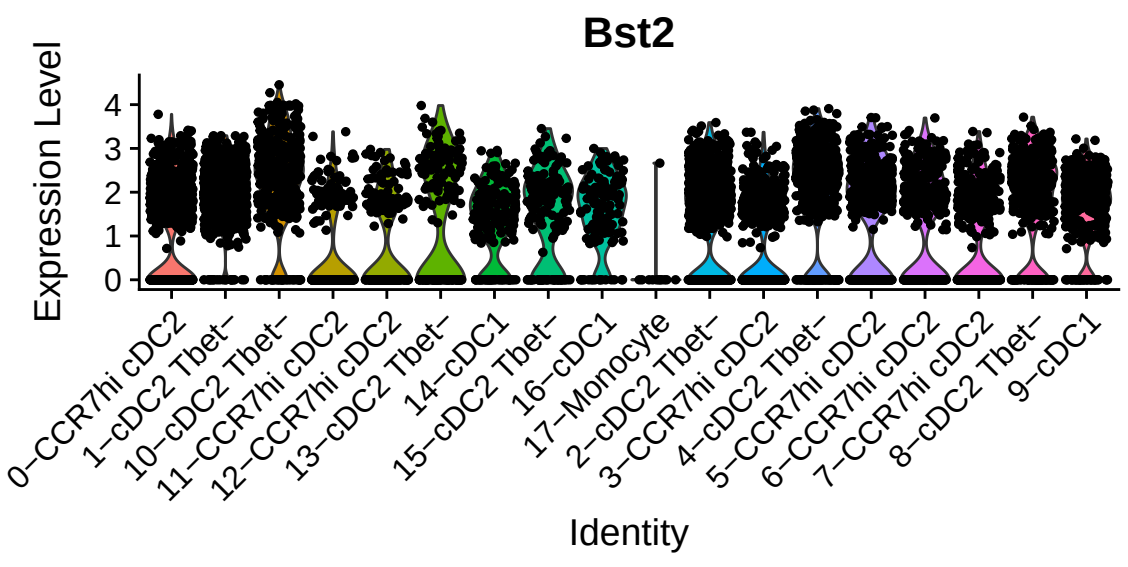

Cd209a
Expression Level
Identity

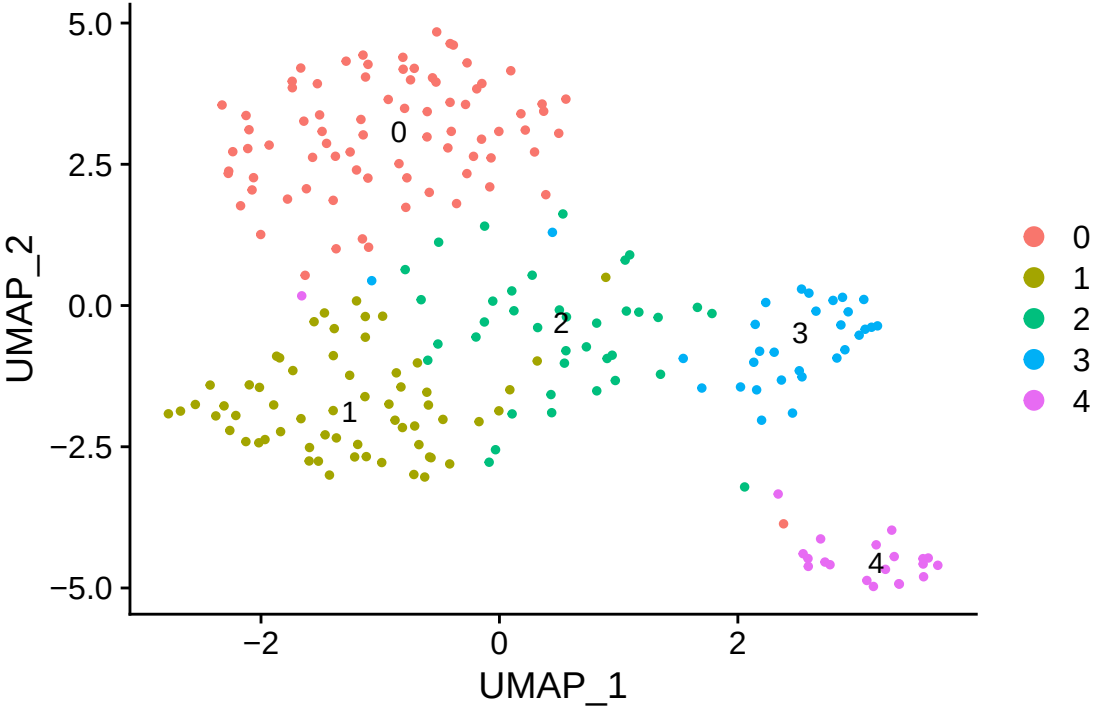

Itgam
Expression Level
Identity

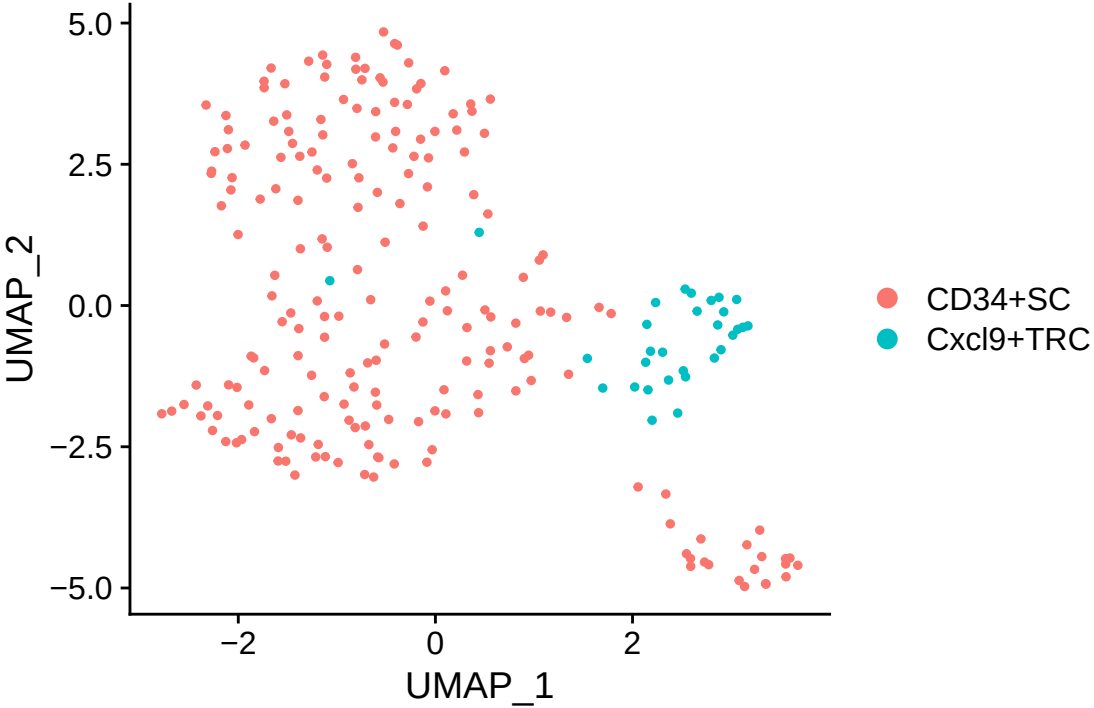

Tbx21
Expression Level
Identity

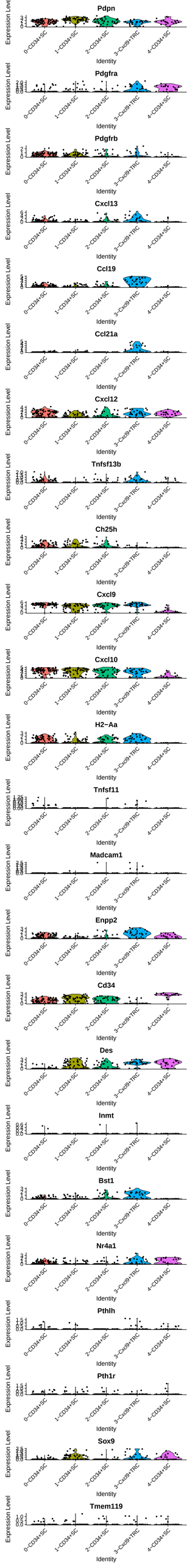

Siglech
Expression Level
Identity

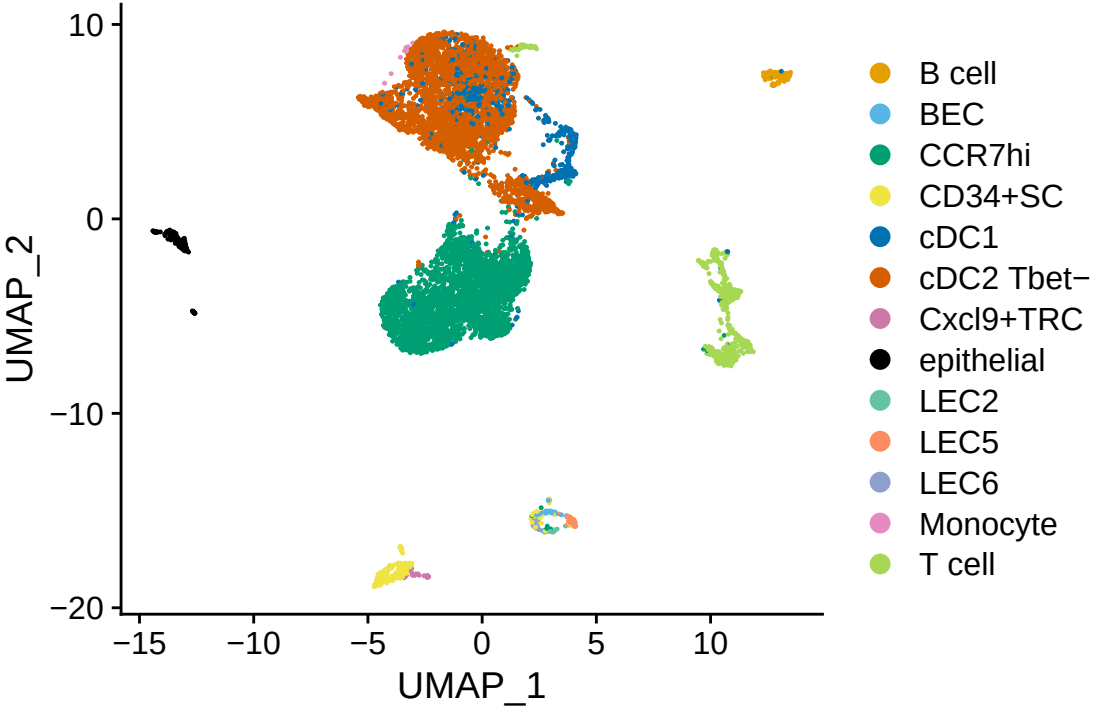

Tcf4
Expression Level
Identity

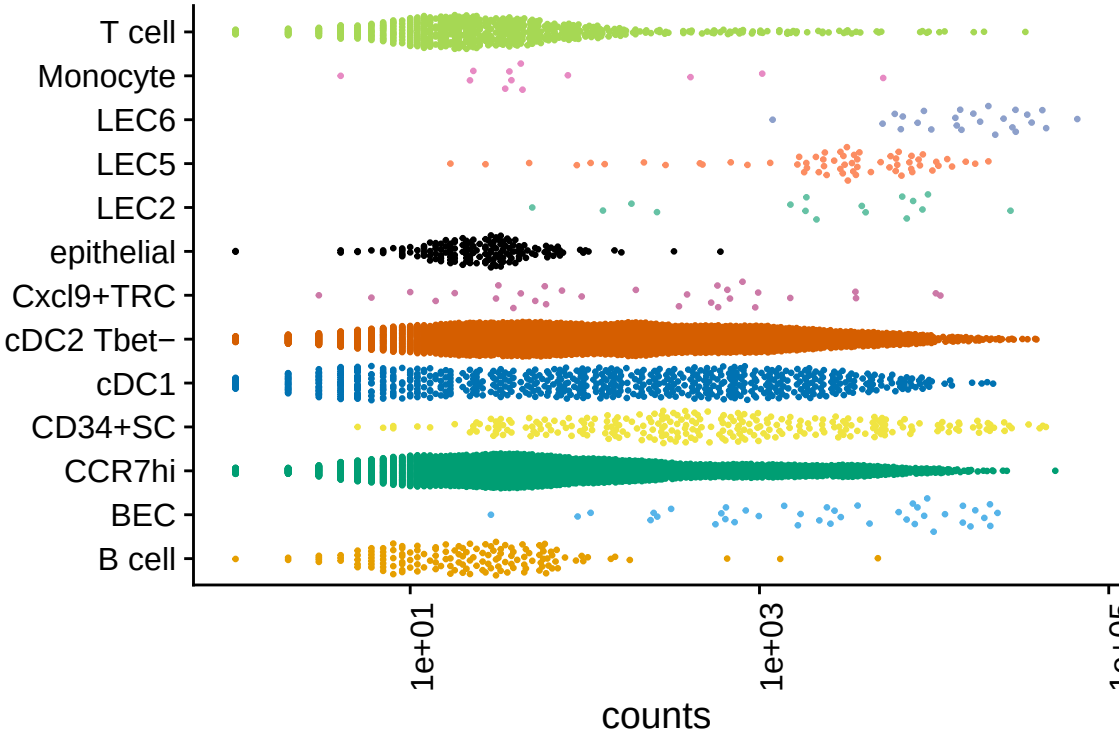

Bst2
Expression Level
Identity

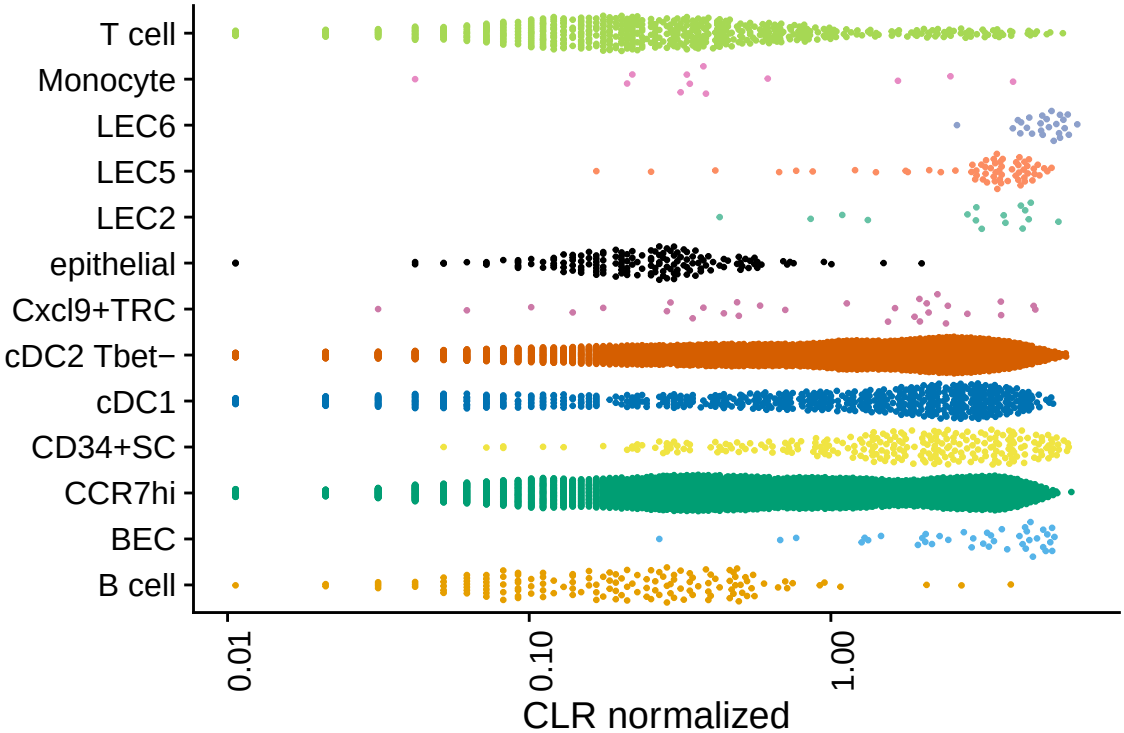

5.0
2.5
0.0
−2.5
−5.0
UMAP_2
−2
0
2
UMAP_1
0
1
2
3
4
0
1
2
3
4


5.0
2.5
0.0
−2.5
−5.0
UMAP_2
−2
0
2
UMAP_1
CD34+SC
Cxcl9+TRC


Pdpn
Pdgfra
Pdgfrb
Cxcl13
Ccl19
Ccl21a
Cxcl12
Tnfsf13b
Ch25h
Cxcl9
Cxcl10
H2−Aa
Tnfsf11
Madcam1
Enpp2
Cd34
Des
Inmt
Bst1
Nr4a1
Pthlh
Pth1r
Sox9
Tmem119
Expression Level
Identity
0−CD34+SC
1−CD34+SC
2−CD34+SC
3−Cxcl9+TRC
4−CD34+SC


10
0
−10
−20
UMAP_2
−15
−10
−5
0
5
10
UMAP_1
B cell
BEC
CCR7hi
CD34+SC
cDC1
cDC2 Tbet−
Cxcl9+TRC
epithelial
LEC2
LEC5
LEC6
Monocyte
T cell


T cell
Monocyte
LEC6
LEC5
LEC2
epithelial
Cxcl9+TRC
cDC2 Tbet−
cDC1
CD34+SC
CCR7hi
BEC
B cell
1e+01
1e+03
1e+05
counts


T cell
Monocyte
LEC6
LEC5
LEC2
epithelial
Cxcl9+TRC
cDC2 Tbet−
cDC1
CD34+SC
CCR7hi
BEC
B cell
0.01
0.10
1.00
CLR normalized