

Figure Dimensions

- Channels
- Populations
- Dosages
- Timepoints
- Conditions
- Individuals
- Sample Types
- Fcs Files
- Plate Column
- Plate Ro

Conditions

2 of 3 selected Choose Setup

TH-MYCN de novo 129 SPL

TH-MYCN de novo 129 Tumor

Unselected Conditions:
Healthy SPL + SB28 r.c.

Columns

Channels

32 of 63 selected Choose Setup

B220_In113 (v) - Panel 1

CD103_Nd148 (v) - Panel 1

CD115_Er170 (v) - Panel 1

CD11a_In115 (v) - Panel 1

CD11b_Eu153 (v) - Panel 1

CD11c_Nd143 (v) - Panel 1

Rows

Populations

1 of 7 selected Choose Gate

ViableCD45+

Unselected Populations:
Ungated
CD11b+
CD8+
CD4+
B220+
MHCII+ lin-

Table 1

- Illustration
- Layout Placeholders
- Gating Hierarchy
- Pairwise Plots

(Drag Labels to Reorder Rows and Columns).

Dot Plot Controls

Plot Type

Dot

Color By

Channel

Coloring Channel

Panel/Channel Values

Coloring Channel Range

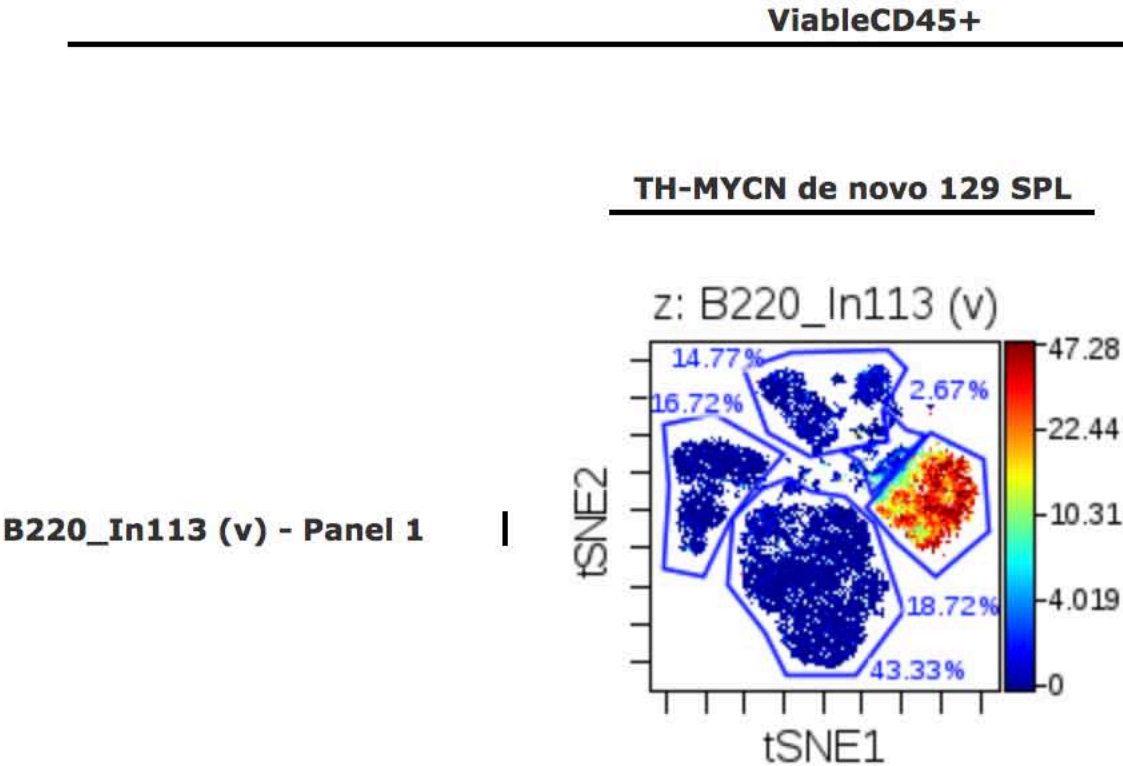
Global (all files)

Palette

Spectrum

Dot Plotting Method

Binned Pixels



? Download Files

All FCS Files☒

All Attachments☐

<input type="checkbox"/>	Filename	Description	Size	Type	Events
<input type="checkbox"/>	 viSNE_12114_171129_viSNE2_ViableCD45_31markers_19929_all_cells.171129viSNEoverlaysgated.Dot.20171129_1545.pdf		988 KB	Attachment	
<input checked="" type="checkbox"/>	 171128 Batch 11 titration debar1_Pop09_TH-MYCN_SPL_ViableSinglets_ViableCD45_viSNE.fcs		4.59 MB	FCS	19084
<input checked="" type="checkbox"/>	 171128 Batch 11 titration debar1_Pop10_TH-MYCN_Tumor_ViableSinglets_ViableCD45_viSNE.fcs		212 KB	FCS	845

☐  Sample Tags

 Zip & Download Files



cytofkit: an Integrated Analysis Pipeline for Mass Cytometry Data

Raw FCS Directory :



/Users/esimonds/Downloads/experiment_12114_files

Choose...

FCS File(s) :



/Users/esimonds/Downloads/experiment_12114_files/171128 Batch 11 tit

Select...

Markers :



Lu175 (v)>} {Yb176Di<CD90_Yb176 (v)>} {Bi209Di<I-A-I-E_Bi209 (v)>

Select...

Result Directory :



/Users/esimonds/Downloads/experiment_12114_files

Choose...

Project Name :



cytofkit_test

Merge Method :



☐ all ☐ min ☒ ceil ☐ fixed

Fixed Number : 9999999



Transformation Method :



☐ autoLgcl ☒ cytofAsinh ☐ Fixedlogicle ☐ none

Cluster Method(s) :



☒ Rphenograph ☐ ClusterX ☐ DensVM ☐ NULL

Visualization Method(s) :



☐ pca ☐ isomap ☒ tsne ☐ NULL

Cellular Progression :



☐ diffusionmap ☐ isomap ☒ NULL

Reset

Submit

Quit

```

> cytofit_GUI()
Input arguments:
* Project Name: cytofit_test
* Input FCS files for analysis:
  -171128 Batch 11 titration debar1_Pop09_TH-MYCN_SPL_ViableSinglets_ViableCD45_visNE.fcs
  -171128 Batch 11 titration debar1_Pop10_TH-MYCN_Tumor_ViableSinglets_ViableCD45_visNE.fcs
* Markers:
  -Y89Di<CD45_Y89 (v)>
  -In113Di<B220_In113 (v)>
  -In115Di<CD11a_In115 (v)>
  -La139Di<Ly-6G_La139 (v)>
  -Nd142Di<CD49b_Nd142 (v)>
  -Nd143Di<CD11c_Nd143 (v)>
  -Nd145Di<CD27_Nd145 (v)>
  -Nd146Di<CD206_Nd146 (v)>
  -Sm147Di<CD274_Sm147 (v)>
  -Nd148Di<CD103_Nd148 (v)>
  -Sm149Di<CD152_Sm149 (v)>
  -Sm150Di<CD317_Sm150 (v)>
  -Eu151Di<Ly-6C_Eu151 (v)>
  -Eu153Di<CD11b_Eu153 (v)>
  -Gd155Di<CD8a_Gd155 (v)>
  -Gd156Di<CD4_Gd156 (v)>
  -Gd157Di<CD3e_Gd157 (v)>
  -Dy162Di<CD135_Dy162 (v)>
  -Dy163Di<CD62L_Dy163 (v)>
  -Dy164Di<CD278_Dy164 (v)>
  -Ho165Di<CD69_Ho165 (v)>
  -Er166Di<CD49d_Er166 (v)>
  -Er168Di<CD25_Er168 (v)>
  -Tm169Di<F4-80_Tm169 (v)>
  -Er170Di<CD115_Er170 (v)>
  -Yb172Di<KLRG1_Yb172 (v)>
  -Yb174Di<CD197_Yb174 (v)>
  -Lu175Di<CD44_Lu175 (v)>
  -Yb176Di<CD90_Yb176 (v)>
  -Bi209Di<I-A-I-E_Bi209 (v)>
* Data merging method: ceil
* Data transformation method: cytofAsinh
* Dimensionality reduction method: tsne
* Data clustering method(s): Rphenograph
* Data visualization method(s): tsne
* Subset progression analysis method: NULL

Extract expression data...
19929 x 61 data was extracted!
Dimension reduction...
Running t-SNE...with seed 42

```


Interactive Exploration of cytofkit Analysis Results

Load cytofkit RData:

Browse...

No file selected

Server File Select

Loaded:
/Users/esimonds/Downloads/experiment_12114_files/cytofkit_t

Submit

Reset Data

Plot Control:

☒ Add Cluster Labels

☐ Repel Cluster Labels

☐ Separate Plot by Samples

Download Cluster Plot in PDF

PDF width(in):
3820

PDF height(in):
3820

Open download folder

Sample Filter:

☒ 171128 Batch 11 titration debar1_Pop09_TH-MYCN_SPL_ViableSinglets_ViableCD45_viSNE

☒ 171128 Batch 11 titration debar1_Pop10_TH-MYCN_Tumor_ViableSinglets_ViableCD45_viSNE

Data Summary:

Expression Data:
-- 19929 cells x 61 markers

Markers used for dimension reduction and clustering:
-- Y89Di<CD45_Y89 (v)> | In113Di<B220_In113 (v)> | In115Di<CD11a_In115 (v)> | La139Di<Ly-6G_La139

Cluster Panel

Marker Panel

Sample Panel

Progression Panel

Cluster Plot

Change Cluster Color

Annotate Clusters

Run FlowSOM

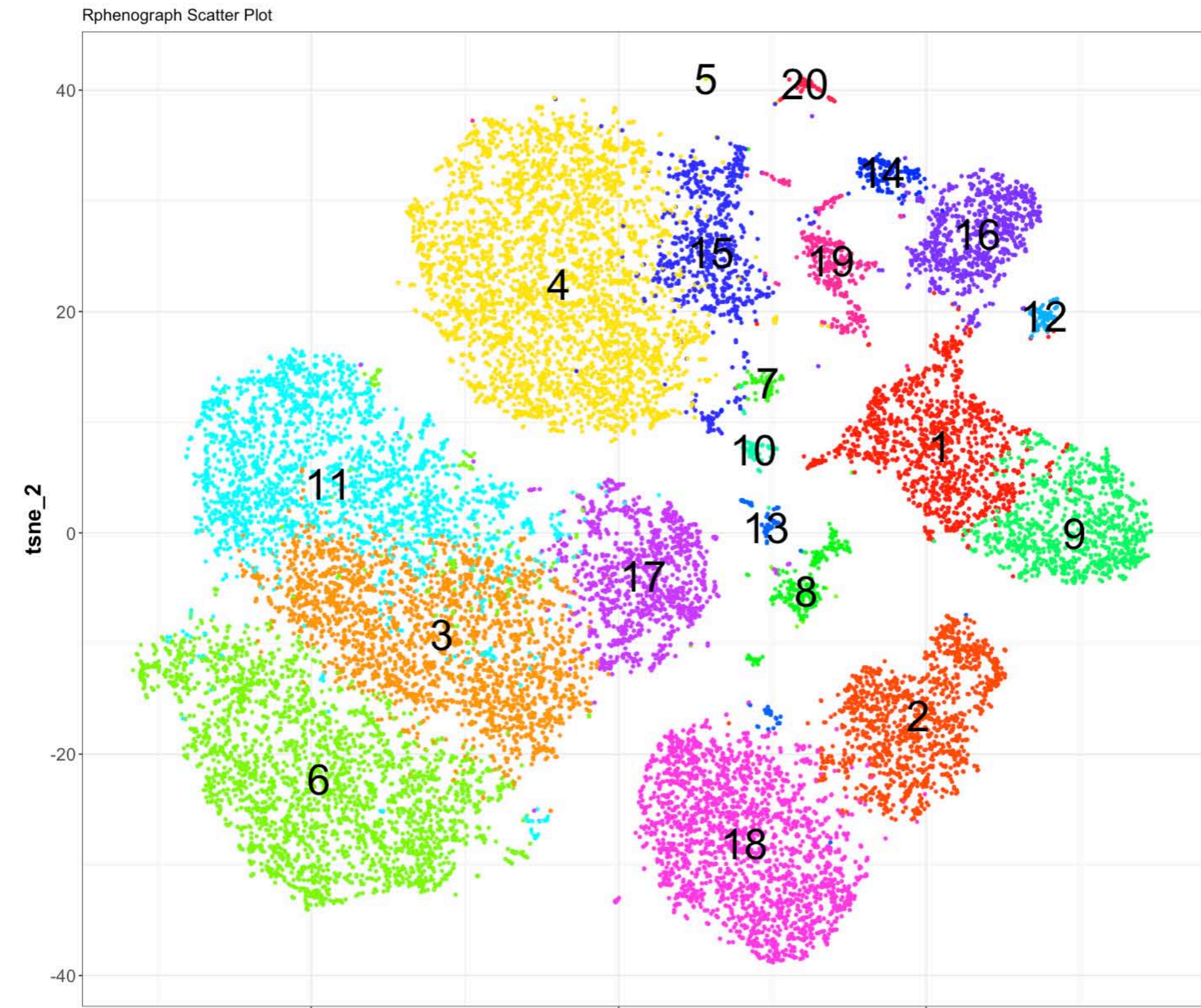
Visualization Method:
tsne

Cluster By:
Rphenograph

Point Size:
1

Label Size:
12

Clusters Filter:
1234567891011121314151617181920







? Uploading files




Status: Upload 66% complete ...

Name	Size	Type	
cytofit_171128 Batch 11 titration debar1_Pop10_TH-MYCN_Tumor_ViableSinglets_ViableCD45_visNE.fcs	239 KB	FCS	
cytofit_171128 Batch 11 titration debar1_Pop09_TH-MYCN_SPL_ViableSinglets_ViableCD45_visNE.fcs	5.1 MB	FCS	65%
5.34 MB		2 files	



cytofit_test_analyzedFCS

<>


   


   

Search

cytofit_test_analyzedFCS	Desktop	
Name	Date Modified	Size
 cytofit_171128 Batch 11 titration...iableSinglets_ViableCD45_visNE.fcs	Today, 3:42 PM	5.4 MB
 cytofit_171128 Batch 11 titration...iableSinglets_ViableCD45_visNE.fcs	Today, 3:42 PM	244 KB

Favorites

 Applications

 esimonds



? Gating

Import Gates



Import Gating-ML

Apply & Return

Apply



Active Population

Ungated



Active Compensation

File-Internal Compensation

Plot Settings

Plot Type

Dot - Color By Channel

Gate Label

Percent

Plot Colors

Spectrum

More

Kernel Smoothing

1

Percent per Contour

10

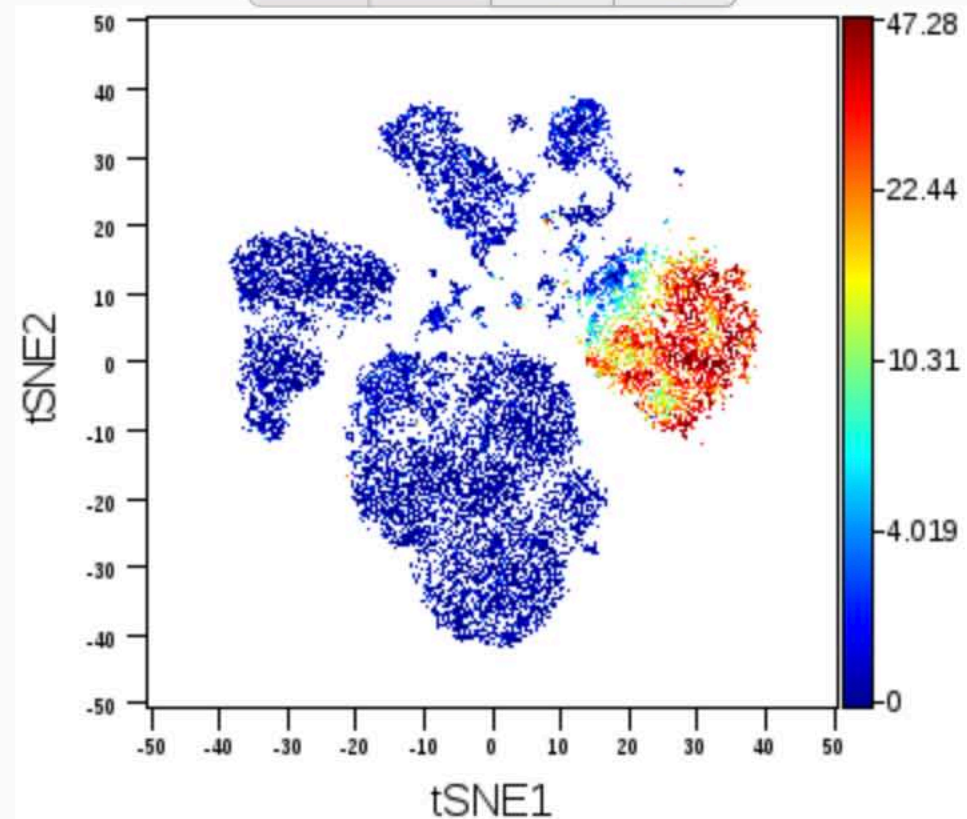
Outliers Start At

10



File/Sample Name

cytofkit_171128 Batch 11 titration de



(X, Y) : -66.17, 21.32

Y-Channel

tSNE2



X-Channel

tSNE1



Coloring Channel

B220_In113 (v) [In113]



Gating

Import Gates

Import Gating-ML

Apply & Return

Apply



Active Population

Ungated



Active Compensation

File-Internal Compensation

Plot Settings

Plot Type

Dot - Color By Channel

Gate Label

Percent

Plot Colors

Spectrum

More

Kernel Smoothing



1

Percent per Contour

10

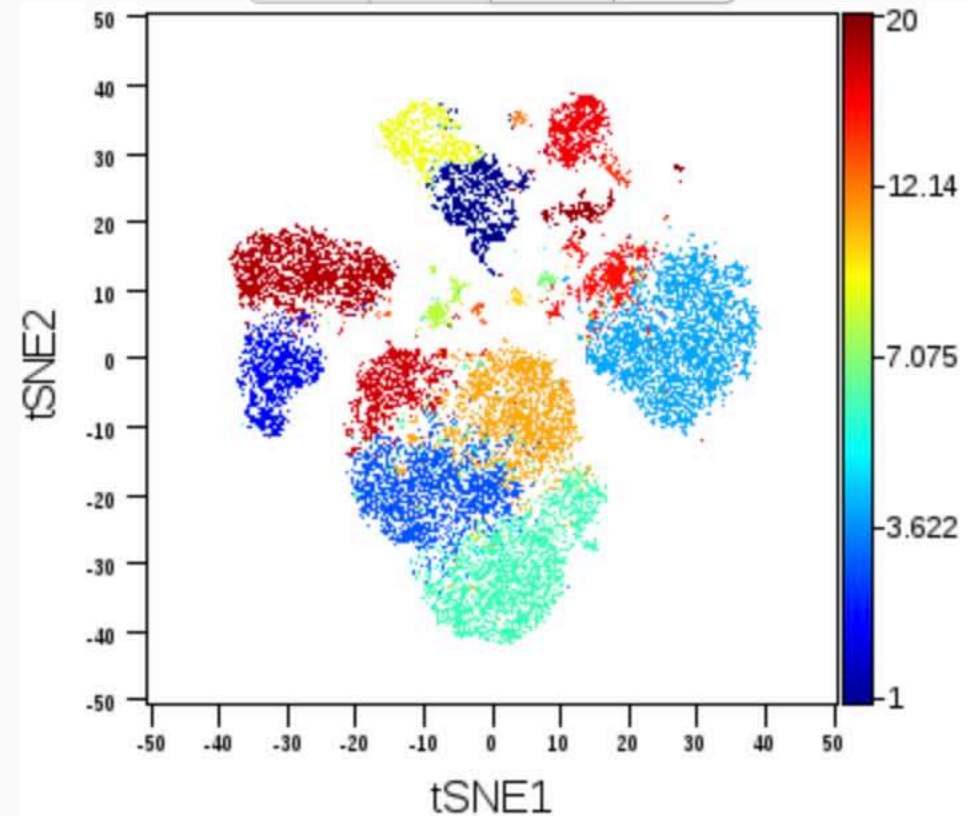
Outliers Start At

10



File/Sample Name

cytofit_171128 Batch 11 titration de



(X, Y) : 1.78, -66.28

Y-Channel tSNE2

X-Channel tSNE1

Coloring Channel Rphenograph_clusterII

