## Sheet1

```
~/Desktop/immune/data/210410/CTLescape allsequences/tat raw sequences.tsv
PBMC
        7
               0 [%]
                          LN
                                7 21213 [34.94%] RB
                                                       7 18383 [30.28%] PL
                                                                             7 21119 [34.78%]
PBMC
       10 21469 [35.51%] LN
                                      0 [NaN%]
                                                      10 17862 [29.54%] PL
                                                                            10 21130 [34.95%]
                               10
                                                RB
PBMC
       14 19871 [25.25%] LN
                               14 17987 [22.85%] RB
                                                      14 23395 [29.73%] PL
                                                                            14 17449 [22.17%]
PBMC
       28 18202 [14.72%] LN
                               28 19841 [16.05%] RB
                                                      28 20094 [16.25%] PL
                                                                            28 65521 [52.99%]
PBMC
       56 15979 [22.02%] LN
                               56
                                      0 [NaN%]
                                                                            56 56603 [77.98%]
                                                RB
                                                      56
                                                             0 [NaN%] PL
PBMC
       84 94867 [82.86%] LN
                               84
                                                 RB
                                                      84
                                                                            84 19629 [17.14%]
                                      0 [NaN%]
                                                             0 [NaN%] PL
PBMC 168 92949 [83.4%] LN
                              168
                                      0 [NaN%]
                                                 RB
                                                     168 18502 [16.6%] PL 168
                                                                                   0 [NaN%]
~/Desktop/immune/data/210410/CTLescape allsequences/tat raw sequences.tsv
PBMC
        7
               0 [%]
                          LN
                                7 20606 [36.55%] RB
                                                       7 14871 [26.38%] PL
                                                                             7 20896 [37.07%]
PBMC
       10 20939 [38.69%] LN
                                      0 [NaN%]
                                                RB
                                                      10 12221 [22.58%] PL
                                                                            10 20960 [38.73%]
                               10
PBMC
       14 19400 [26.71%] LN
                               14 16860 [23.22%] RB
                                                      14 19204 [26.44%] PL
                                                                            14 17155 [23.62%]
       28 17499 [15.31%] LN
                                                      28 15230 [13.32%] PL
PBMC
                               28 19096 [16.7%]
                                                 RB
                                                                            28 62504 [54.67%]
PBMC
       56 15549 [22.49%] LN
                               56
                                      0 [NaN%]
                                                 RB
                                                      56
                                                             0 [NaN%] PL
                                                                            56 53602 [77.51%]
PBMC
       84 94474 [83.23%] LN
                               84
                                      0 [NaN%]
                                                 RB
                                                      84
                                                             0 [NaN%] PL
                                                                            84 19029 [16.77%]
PBMC 168 92607 [83.71%] LN
                              168
                                                 RB
                                                     168 18025 [16.29%] PL 168
                                                                                   0 [NaN%]
                                      0 [NaN%]
~/Desktop/immune/data/210410/CTLescape_allsequences/tat_raw_sequences.tsv
PBMC
        7
               0 [%]
                          LN
                                7 17277 [33.69%] RB
                                                       7 13950 [27.2%] PL
                                                                             7 20057 [39.11%]
PBMC
       10 19532 [40.08%] LN
                               10
                                      0 [NaN%]
                                                RB
                                                      10 9128 [18.73%] PL
                                                                            10 20073 [41.19%]
PBMC
       14 15329 [28.13%] LN
                               14
                                  8740 [16.04%] RB
                                                      14 16724 [30.7%] PL
                                                                            14 13691 [25.13%]
PBMC
                                   3080 [15.17%] RB
                                                          6425 [31.64%] PL
       28
            5362 [26.41%] LN
                               28
                                                      28
                                                                            28
                                                                                5439 [26.79%]
PBMC
       56
            4054 [36.99%] LN
                               56
                                      0 [NaN%]
                                                 RB
                                                      56
                                                             0 [NaN%] PL
                                                                            56
                                                                                6906 [63.01%]
PBMC
                               84
                                                      84
                                                             0 [NaN%] PL
                                                                            84
                                                                                 179 [0.85%]
       84 20988 [99.15%] LN
                                      0 [NaN%]
                                                 RB
PBMC 168 16388 [78.41%] LN
                             168
                                                                                   0 [NaN%]
                                      0 [NaN%]
                                                 RB
                                                     168
                                                         4512 [21.59%] PL 168
~/Desktop/immune/data/210410/CTLescape allsequences/tat raw sequences.tsv
PBMC
                                  3329 [65.42%] RB
                                                           921 [18.1%] PL
                                                                             7
        7
               0 [%]
                          LN
                                                                                 839 [16.49%]
PBMC
                               10
       10
            1407 [26.12%] LN
                                      0 [NaN%]
                                                 RB
                                                      10
                                                          3093 [57.42%] PL
                                                                            10
                                                                                 887 [16.47%]
PBMC
       14
            4071 [22.45%] LN
                                  8120 [44.78%] RB
                                                          2480 [13.68%] PL
                                                                            14
                                                                                3464 [19.1%]
PBMC
       28 12137 [12.91%] LN
                               28 16016 [17.03%] RB
                                                      28
                                                          8805 [9.36%] PL
                                                                            28 57065 [60.69%]
PBMC
       56 11495 [19.75%] LN
                                                RB
                                                      56
                                                             0 [NaN%] PL
                                                                            56 46696 [80.25%]
                               56
                                      0 [NaN%]
PBMC
       84 73486 [79.59%] LN
                                                      84
                                                             0 [NaN%] PL
                                                                            84 18850 [20.41%]
                               84
                                      0 [NaN%]
                                                 RB
PBMC 168 76219 [84.94%] LN
                             168
                                      0 [NaN%]
                                                 RB
                                                     168 13513 [15.06%] PL 168
                                                                                   0 [NaN%]
~/Desktop/immune/data/210410/CTLescape_allsequences/tat_aligned_sequences.tsv
PBMC
        7
                          LN
                                7 20022 [34.42%] RB
                                                       7 17987 [30.92%] PL
                                                                             7 20163 [34.66%]
               0 [%]
PBMC
       10 19991 [35.25%] LN
                               10
                                      0 [NaN%]
                                                      10 16653 [29.36%] PL
                                                                            10 20070 [35.39%]
                                                RB
PBMC
       14 18937 [25.48%] LN
                               14 16518 [22.22%] RB
                                                      14 22541 [30.33%] PL
                                                                            14 16331 [21.97%]
PBMC
       28 16856 [14.51%] LN
                               28 18712 [16.11%] RB
                                                      28 19645 [16.92%] PL
                                                                            28 60922 [52.46%]
PBMC
       56 15200 [22.52%] LN
                               56
                                      0 [NaN%]
                                                 RB
                                                      56
                                                             0 [NaN%] PL
                                                                            56 52281 [77.48%]
       84 94092 [83.58%] LN
                                                                            84 18490 [16.42%]
PBMC
                               84
                                                             0 [NaN%] PL
                                      0 [NaN%]
                                                 RB
                                                      84
PBMC 168 92412 [84.12%] LN
                              168
                                      0 [NaN%]
                                                 RB
                                                     168 17441 [15.88%] PL 168
                                                                                   0 [NaN%]
~/Desktop/immune/data/210410/CTLescape allsequences/tat aligned sequences.tsv
PBMC
        7
                                7 19722 [36.26%] RB
                                                       7 14641 [26.92%] PL
                                                                             7 20025 [36.82%]
               0 [%]
                          LN
PBMC
       10 19627 [38.39%] LN
                               10
                                      0 [NaN%]
                                                RB
                                                      10 11529 [22.55%] PL
                                                                            10 19965 [39.05%]
PBMC
       14 18595 [26.79%] LN
                               14 15897 [22.9%]
                                                 RB
                                                      14 18724 [26.98%] PL
                                                                            14 16191 [23.33%]
PBMC
       28 16516 [15.09%] LN
                               28 18367 [16.78%] RB
                                                      28 15114 [13.81%] PL
                                                                            28 59471 [54.33%]
PBMC
       56 15035 [22.79%] LN
                               56
                                      0 [NaN%]
                                                 RB
                                                      56
                                                             0 [NaN%] PL
                                                                            56 50942 [77.21%]
PBMC
       84 93861 [83.76%] LN
                               84
                                      0 [NaN%]
                                                 RB
                                                      84
                                                             0 [NaN%] PL
                                                                            84 18203 [16.24%]
```

## Sheet1

```
0 [NaN%] RB 168 17268 [15.77%] PL 168
PBMC 168 92204 [84.23%] LN 168
                                                                                   0 [NaN%]
~/Desktop/immune/data/210410/CTLescape allsequences/tat aligned sequences.tsv
PBMC
                         LN
                                7 16579 [33.43%] RB
                                                       7 13772 [27.77%] PL
                                                                            7 19248 [38.81%]
        7
               0 [%]
PBMC
       10 18316 [39.64%] LN
                               10
                                      0 [NaN%] RB
                                                      10 8743 [18.92%] PL
                                                                           10 19149 [41.44%]
PBMC
       14 14730 [28.16%] LN
                               14
                                  8224 [15.72%] RB
                                                      14 16339 [31.24%] PL
                                                                           14 13010 [24.87%]
PBMC
            5148 [26.02%] LN
                               28
                                  3000 [15.17%] RB
                                                         6379 [32.25%] PL
                                                                               5255 [26.56%]
       28
                                                      28
                                                                           28
PBMC
       56
                                                             0 [NaN%] PL
                                                                           56
                                                                               6690 [62.91%]
            3944 [37.09%] LN
                               56
                                      0 [NaN%]
                                                RB
                                                      56
PBMC
       84 20881 [99.17%] LN
                               84
                                      0 [NaN%]
                                                RB
                                                      84
                                                             0 [NaN%] PL
                                                                           84
                                                                                 175 [0.83%]
PBMC 168 16354 [78.79%] LN 168
                                      0 [NaN%]
                                                RB
                                                    168 4403 [21.21%] PL 168
                                                                                   0 [NaN%]
~/Desktop/immune/data/210410/CTLescape_allsequences/tat_aligned_sequences.tsv
PBMC
        7
                         LN
                                  3143 [65.63%] RB
                                                       7
                                                           869 [18.15%] PL
                                                                            7
                                                                                 777 [16.22%]
               0 [%]
PBMC
       10
            1311 [26.68%] LN
                               10
                                      0 [NaN%]
                                                         2786 [56.71%] PL
                                                                           10
                                                                                 816 [16.61%]
                                                RB
                                                      10
                                                         2385 [13.94%] PL
PBMC
       14
            3865 [22.6%] LN
                                  7673 [44.86%] RB
                                                                           14
                                                                               3181 [18.6%]
PBMC
       28 11368 [12.68%] LN
                               28 15367 [17.13%] RB
                                                      28
                                                         8735 [9.74%] PL
                                                                           28 54216 [60.45%]
PBMC
       56 11091 [20.04%] LN
                                      0 [NaN%]
                                                RB
                                                      56
                                                             0 [NaN%] PL
                                                                           56 44252 [79.96%]
                                      0 [NaN%]
PBMC
       84 72980 [80.19%] LN
                               84
                                                RB
                                                      84
                                                             0 [NaN%] PL
                                                                           84 18028 [19.81%]
PBMC 168 75850 [85.5%] LN
                             168
                                                    168 12865 [14.5%] PL 168
                                                                                   0 [NaN%]
                                      0 [NaN%]
                                                RB
~/Desktop/immune/data/210410/CTLescape allsequences/tat aligned sequences trim.tsv
PBMC
        7
               0 [%]
                         LN
                                7 19256 [36.69%] RB
                                                       7 13898 [26.48%] PL
                                                                            7 19326 [36.83%]
PBMC
       10 18791 [38.25%] LN
                               10
                                      0 [NaN%] RB
                                                      10 11180 [22.76%] PL
                                                                           10 19155 [38.99%]
PBMC
       14 17950 [26.85%] LN
                                                      14 17809 [26.64%] PL
                                                                           14 15613 [23.36%]
                               14 15471 [23.15%] RB
PBMC
       28 15998 [15.01%] LN
                               28 17912 [16.81%] RB
                                                      28 14664 [13.76%] PL
                                                                           28 58011 [54.43%]
PBMC
       56 14641 [22.76%] LN
                               56
                                      0 [NaN%]
                                                RB
                                                      56
                                                             0 [NaN%] PL
                                                                           56 49684 [77.24%]
PBMC
       84 91614 [83.78%] LN
                               84
                                                      84
                                      0 [NaN%]
                                                RB
                                                             0 [NaN%] PL
                                                                           84 17735 [16.22%]
PBMC 168 89935 [84.23%] LN
                             168
                                      0 [NaN%]
                                                RB
                                                    168 16844 [15.77%] PL 168
                                                                                   0 [NaN%]
~/Desktop/immune/data/210410/CTLescape allsequences/tat aligned sequences trim.tsv
PBMC
        7
                                7 19248 [36.69%] RB
                                                       7 13894 [26.48%] PL
               0 [%]
                         LN
                                                                            7 19325 [36.83%]
PBMC
       10 18782 [38.25%] LN
                               10
                                      0 [NaN%]
                                                RB
                                                      10 11179 [22.76%] PL
                                                                           10 19148 [38.99%]
PBMC
       14 17944 [26.85%] LN
                               14 15467 [23.15%] RB
                                                      14 17803 [26.64%] PL
                                                                           14 15607 [23.36%]
PBMC
       28 15993 [15.01%] LN
                               28 17911 [16.81%] RB
                                                      28 14660 [13.76%] PL
                                                                           28 58001 [54.43%]
PBMC
                                                      56
       56 14636 [22.76%] LN
                               56
                                      0 [NaN%]
                                                RB
                                                             0 [NaN%] PL
                                                                           56 49677 [77.24%]
PBMC
       84 91614 [83.78%] LN
                               84
                                      0 [NaN%]
                                                RB
                                                      84
                                                             0 [NaN%] PL
                                                                           84 17731 [16.22%]
PBMC 168 89935 [84.23%] LN
                             168
                                      0 [NaN%]
                                                RB
                                                    168 16844 [15.77%] PL 168
                                                                                   0 [NaN%]
~/Desktop/immune/data/210410/CTLescape allsequences/tat aligned sequences trim.tsv
PBMC
        7
               0 [%]
                         LN
                                7 16184 [33.83%] RB
                                                       7 13086 [27.35%] PL
                                                                            7 18576 [38.82%]
PBMC
       10 17510 [39.5%]
                         LN
                               10
                                      0 [NaN%]
                                                      10 8467 [19.1%] PL
                                                                           10 18357 [41.41%]
                                                RB
PBMC
       14 14186 [28.2%]
                         LN
                               14
                                  7985 [15.88%] RB
                                                      14 15573 [30.96%] PL
                                                                           14 12555 [24.96%]
PBMC
       28
            4993 [25.92%] LN
                               28
                                  2944 [15.28%] RB
                                                      28
                                                         6194 [32.15%] PL
                                                                           28
                                                                               5135 [26.65%]
                                                                               6546 [63%]
PBMC
       56
                               56
                                                      56
                                                                           56
            3845 [37%]
                         LN
                                      0 [NaN%]
                                                RB
                                                             0 [NaN%] PL
PBMC
       84 20440 [99.17%] LN
                               84
                                      0 [NaN%]
                                                RB
                                                      84
                                                             0 [NaN%] PL
                                                                           84
                                                                                 171 [0.83%]
PBMC 168 15985 [78.81%] LN
                              168
                                      0 [NaN%]
                                                RB
                                                    168
                                                         4299 [21.19%] PL 168
                                                                                   0 [NaN%]
~/Desktop/immune/data/210410/CTLescape allsequences/tat aligned sequences trim.tsv
PBMC
        7
               0 [%]
                         LN
                                  3064 [66.31%] RB
                                                           808 [17.49%] PL
                                                                            7
                                                                                 749 [16.21%]
PBMC
       10
            1272 [26.64%] LN
                               10
                                      0 [NaN%]
                                                RB
                                                      10 2712 [56.8%] PL
                                                                           10
                                                                                 791 [16.57%]
PBMC
       14
            3758 [22.75%] LN
                               14 7482 [45.29%] RB
                                                      14
                                                         2230 [13.5%] PL
                                                                           14
                                                                               3052 [18.47%]
                                                                           28 52866 [60.56%]
PBMC
       28 11000 [12.6%] LN
                               28 14967 [17.14%] RB
                                                      28
                                                         8466 [9.7%]
                                                                      PL
PBMC
       56 10791 [20.01%] LN
                               56
                                      0 [NaN%]
                                                RB
                                                      56
                                                             0 [NaN%] PL
                                                                           56 43131 [79.99%]
```

## Sheet1

```
PBMC 84 71174 [80.21%] LN
                                      0 [NaN%] RB
                                                     84
                                                            0 [NaN%] PL 84 17560 [19.79%]
PBMC 168 73950 [85.5%] LN
                             168
                                      0 [NaN%]
                                                RB
                                                    168 12545 [14.5%] PL 168
                                                                                   0 [NaN%]
~/Desktop/immune/data/210410/CTLescape_allsequences/tat_aligned_sequences_trim_Complete.tsv
PBMC
                                                      7 12675 [25.7%] PL
               0 [%]
                         LN
                                7 18167 [36.83%] RB
                                                                            7 18483 [37.47%]
PBMC
       10 17730 [38.55%] LN
                               10
                                      0 [NaN%] RB
                                                      10 9988 [21.72%] PL
                                                                           10 18273 [39.73%]
PBMC
       14 16540 [26.47%] LN
                               14 14454 [23.13%] RB
                                                      14 16556 [26.49%] PL
                                                                           14 14939 [23.91%]
PBMC
                                                     28 13131 [13.45%] PL
       28 14078 [14.42%] LN
                              28 16684 [17.09%] RB
                                                                           28 53757 [55.05%]
PBMC
       56 13651 [22.52%] LN
                              56
                                      0 [NaN%]
                                                     56
                                                            0 [NaN%] PL
                                                                           56 46968 [77.48%]
                                                RB
PBMC
       84 88666 [84.07%] LN
                              84
                                      0 [NaN%]
                                                RB
                                                     84
                                                            0 [NaN%] PL
                                                                           84 16803 [15.93%]
PBMC 168 87074 [84.42%] LN
                             168
                                      0 [NaN%]
                                                RB
                                                    168 16073 [15.58%] PL 168
                                                                                   0 [NaN%]
~/Desktop/immune/data/210410/CTLescape allsequences/tat aligned sequences trim Complete.tsv
PBMC
        7
               0 [%]
                                7 18167 [36.83%] RB
                                                       7 12675 [25.7%] PL
                                                                            7 18483 [37.47%]
                         LN
PBMC
       10 17730 [38.55%] LN
                               10
                                      0 [NaN%]
                                                RB
                                                      10 9988 [21.72%] PL
                                                                           10 18273 [39.73%]
PBMC
       14 16540 [26.47%] LN
                              14 14454 [23.13%] RB
                                                      14 16556 [26.49%] PL
                                                                           14 14939 [23.91%]
PBMC
       28 14078 [14.42%] LN
                              28 16684 [17.09%] RB
                                                      28 13131 [13.45%] PL
                                                                           28 53757 [55.05%]
PBMC
       56 13651 [22.52%] LN
                              56
                                      0 [NaN%]
                                                RB
                                                     56
                                                                           56 46968 [77.48%]
                                                            0 [NaN%] PL
       84 88666 [84.07%] LN
                              84
                                                     84
PBMC
                                      0 [NaN%]
                                                RB
                                                            0 [NaN%] PL
                                                                           84 16803 [15.93%]
PBMC 168 87074 [84.42%] LN
                             168
                                      0 [NaN%]
                                                RB
                                                    168 16073 [15.58%] PL 168
                                                                                   0 [NaN%]
~/Desktop/immune/data/210410/CTLescape allsequences/tat aligned sequences trim Complete.tsv
PBMC
        7
               0 [%]
                         LN
                                7 15935 [34.36%] RB
                                                      7 12333 [26.6%] PL
                                                                            7 18104 [39.04%]
PBMC
       10 17210 [39.6%]
                         LN
                               10
                                      0 [NaN%]
                                                RB
                                                      10 8269 [19.03%] PL
                                                                           10 17984 [41.38%]
PBMC
       14 13894 [28.3%] LN
                               14
                                  7973 [16.24%] RB
                                                      14 14847 [30.24%] PL
                                                                           14 12377 [25.21%]
PBMC
       28
            4874 [25.53%] LN
                              28
                                  3042 [15.93%] RB
                                                     28 5976 [31.3%] PL
                                                                           28
                                                                               5200 [27.24%]
PBMC
                                                     56
       56
            3787 [36.04%] LN
                              56
                                      0 [NaN%]
                                                RB
                                                            0 [NaN%] PL
                                                                           56
                                                                               6722 [63.96%]
PBMC
       84 20297 [99.04%] LN
                              84
                                      0 [NaN%]
                                                     84
                                                            0 [NaN%] PL
                                                                           84
                                                                                197 [0.96%]
                                                RB
PBMC 168 15835 [78.91%] LN
                             168
                                                RB
                                                    168
                                                         4232 [21.09%] PL 168
                                      0 [NaN%]
                                                                                   0 [NaN%]
~/Desktop/immune/data/210410/CTLescape allsequences/tat aligned sequences trim Complete.tsv
PBMC
        7
               0 [%]
                         LN
                                  2232 [75.58%] RB
                                                          342 [11.58%] PL
                                                                            7
                                                                                379 [12.83%]
PBMC
       10
             520 [20.57%] LN
                               10
                                      0 [NaN%]
                                                RB
                                                     10 1719 [68%]
                                                                      PL
                                                                           10
                                                                                289 [11.43%]
PBMC
            2646 [19.75%] LN
                                                         1709 [12.76%] PL
       14
                                  6481 [48.37%] RB
                                                     14
                                                                           14
                                                                               2562 [19.12%]
PBMC
       28
            9204 [11.72%] LN
                              28 13642 [17.37%] RB
                                                     28
                                                         7155 [9.11%] PL
                                                                           28 48557 [61.81%]
PBMC
       56
            9864 [19.68%] LN
                              56
                                      0 [NaN%]
                                                     56
                                                            0 [NaN%] PL
                                                                           56 40246 [80.32%]
                                                RB
PBMC
       84
          68369 [80.46%] LN
                              84
                                      0 [NaN%]
                                                RB
                                                     84
                                                            0 [NaN%] PL
                                                                           84 16606 [19.54%]
PBMC 168 71239 [85.75%] LN 168
                                                RB 168 11841 [14.25%] PL 168
                                      0 [NaN%]
                                                                                   0 [NaN%]
```