

Redo experiment 4.1

7/24/15

In vivo 4.2

12 hour

### Preparation of mouse lung single-cell suspension

1. Clean fat, lymph nodes, etc from  $\frac{1}{2}$  to 1 lung.
2. Place each lung in a separate Miltenyi Biotec gentlemacs tube containing **6 samples**
  - a. 2.5 ml RPMI **15 ml RPMI**
  - b. 35.7  $\mu$ l of Roche Liberase TM (collagenase: 14 U/ml) **214.2  $\mu$ l**
  - c. 62.5  $\mu$ l 1 mg/ml DNase I **35 ml DNase I**
3. Ensure gentlemacs tubes are tightly sealed
4. The gentlemacs is set up for several different tissues; choose program Lung\_01
5. Place the tubes on the gentlemacs and start program Lung\_01 (8 seconds). If the lung pieces look too big, run the program a second or even third time. **2.6 ml**
6. Incubate at 37 C for 40 minutes to one hour (I go for an hour, but others in my lab use only 40 minutes), gently mixing  $\frac{1}{2}$  way through.
7. After incubation, add 2.5 ml RPMI with 10% calf serum. **→ 6 samples** **15 ml RPMI**  
**1.6**
8. Choose program Lung\_02 and start it (38 seconds). **1600 rpm**
9. Centrifuge to bring all the cells to the bottom of the tube (250 x g, 5 minutes).
10. Transfer contents to a 50 ml conical via a 70  $\mu$ m mesh. Wash the gentlemacs tube with 2.5 ml RPMI/calf serum and add the wash to the 50 ml conical (don't mix up the samples). **Don't aspirate** **→**
11. Centrifuge 8-10 minutes at 250 x g
12. Aspirate SN.
13. Lyse RBCs using ACK as per your favorite method.
14. Wash cells, resuspend in FCM buffer and stain.

We use PE-conjugated anti-CD3, CD14, CD16/32, B220; PerCP cy5.5 conjugated anti-CD44 and APC-conjugated anti-CD25 (clone PC61); you can use the colors you have.

We use the gating strategy below.

