

### **Magnetic cell separation of lymphocytes**

1. Prepare single cell suspension
2. Remove the clumps by passing through 70  $\mu\text{m}$  nylon cell strainer and finger flipping the tip of the tube
3. add Fc blocker 0.2  $\mu\text{g}/10^6$  cells , incubate ice for 15 minutes
4. Wash cells with MACS buffer and remove the supernatant
5. Vortex CD4 particles thoroughly, add 50  $\mu\text{l}$  for every  $10^7$  total cells.
6. Mix thoroughly and refrigerate for half an hour.
7. Bring the volume up to  $1-8 \times 10^7$  cells/ml with Mag buffer.

### **Isolation of cells by Magnetic columns**

8. Fix the column
9. Fill the column by 500  $\mu\text{l}$  buffer, let the buffer to flow through, discard the effluent, do not allow them to dry.
10. apply the magnetic labeled cells in 500  $\mu\text{l}$  buffer -  $10^8$  total cells, 1000  $\mu\text{l}$  buffer – 2 x  $10^8$  total cells
11. Rinse with 3x 500  $\mu\text{l}$  buffer
12. Apply 1 ml buffer to flush out the positive
13. Rinse 2-3 x 500  $\mu\text{l}$  buffer to wash the remaining
14. Positive minimum is 500  $\mu\text{l}$