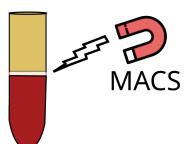


## 10X 5' Workflow

### differentiation protocol

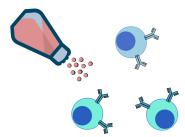
#### 1. purify B cells



#### 2. analyze *in-vivo* samples

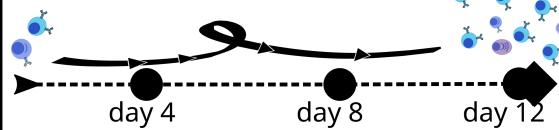
- input B cells (day 0)
- long-lived
- plasma cells: (LLPCs)

#### 3. stimulate w/ cytokines

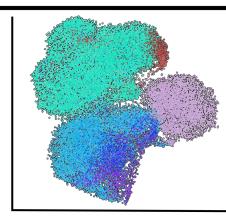


#### 4. analyze *in-vitro* time-course

division, differentiation, CSR



### measurements

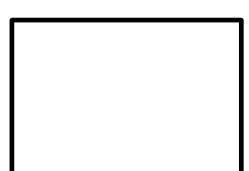


VDJ C

mutation status  
isotype / class



surface expression



clonal origin