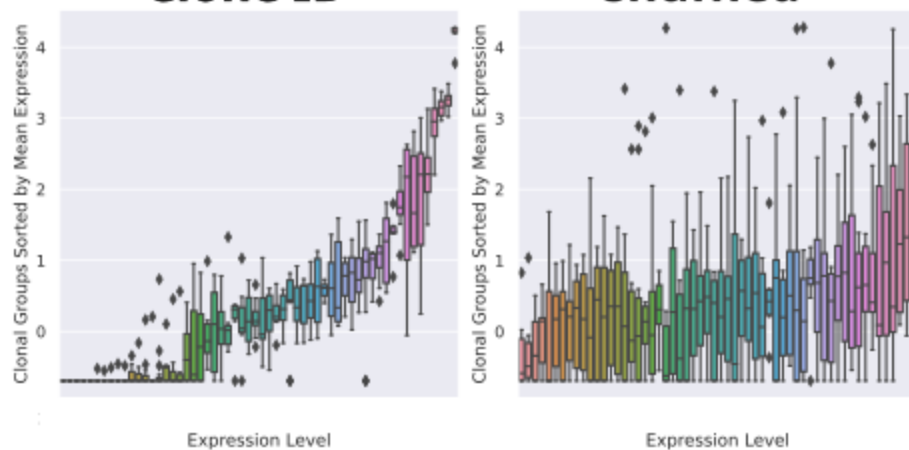


## Clone ID

## shuffled

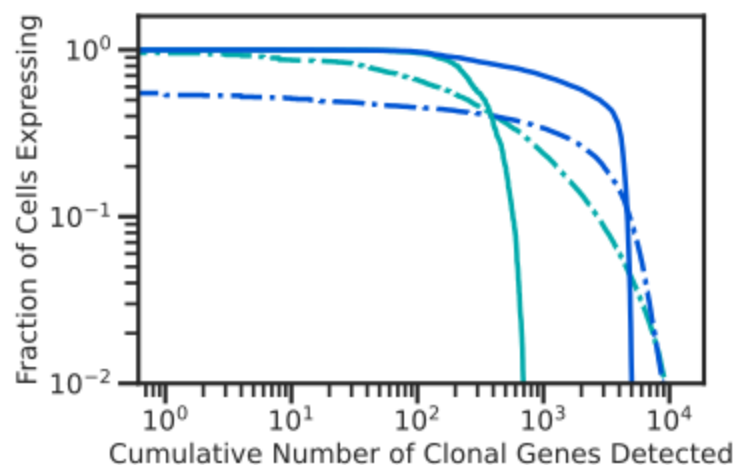
a



*intuitive look at the raw data and strength of the signal*

## IGKC

b



■ in vitro

■ in vivo

— clonal

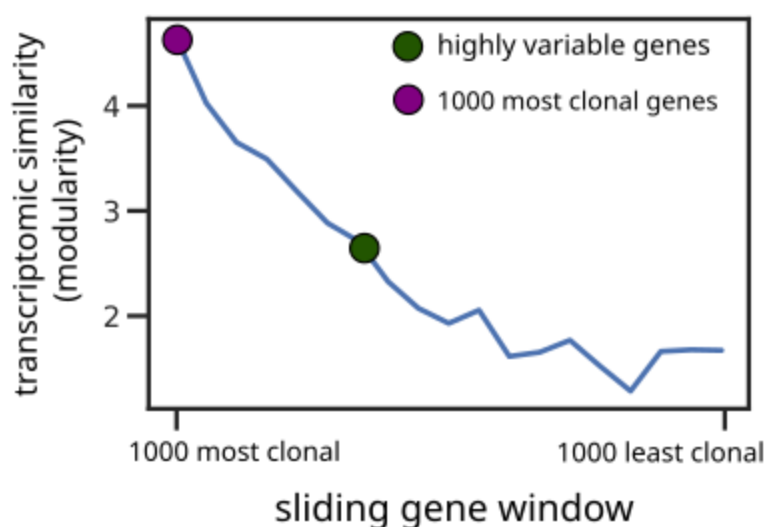
- - - not clonal

*quantification of how many genes are detected as clonal in vivo and in vitro, as a function of dropout. This is really a pretty interesting aspect of things these long live plasma cells are expected to have a common ancestor on the time scale of months to years ago*

c

**Upset plot In Vivo vs. Ex Vivo Genes and IgH genes, putatively B cell development related house keeping**

d



*transcriptomic comparison of clones on the nearest neighbor graph, basically if they have more edges/connections to their siblings the score is higher. On the left side I have the modularity score (higher means more connected). On the right side next time I will have another line quantifying the total number of significant clones*