A

## Data collection

GEO, Zenodo
Figshare

Keywords search →

Obtain studies using
single cell CRISPR screening platform →

Integrate data from
scPerturb and sc-pert →

scanpy

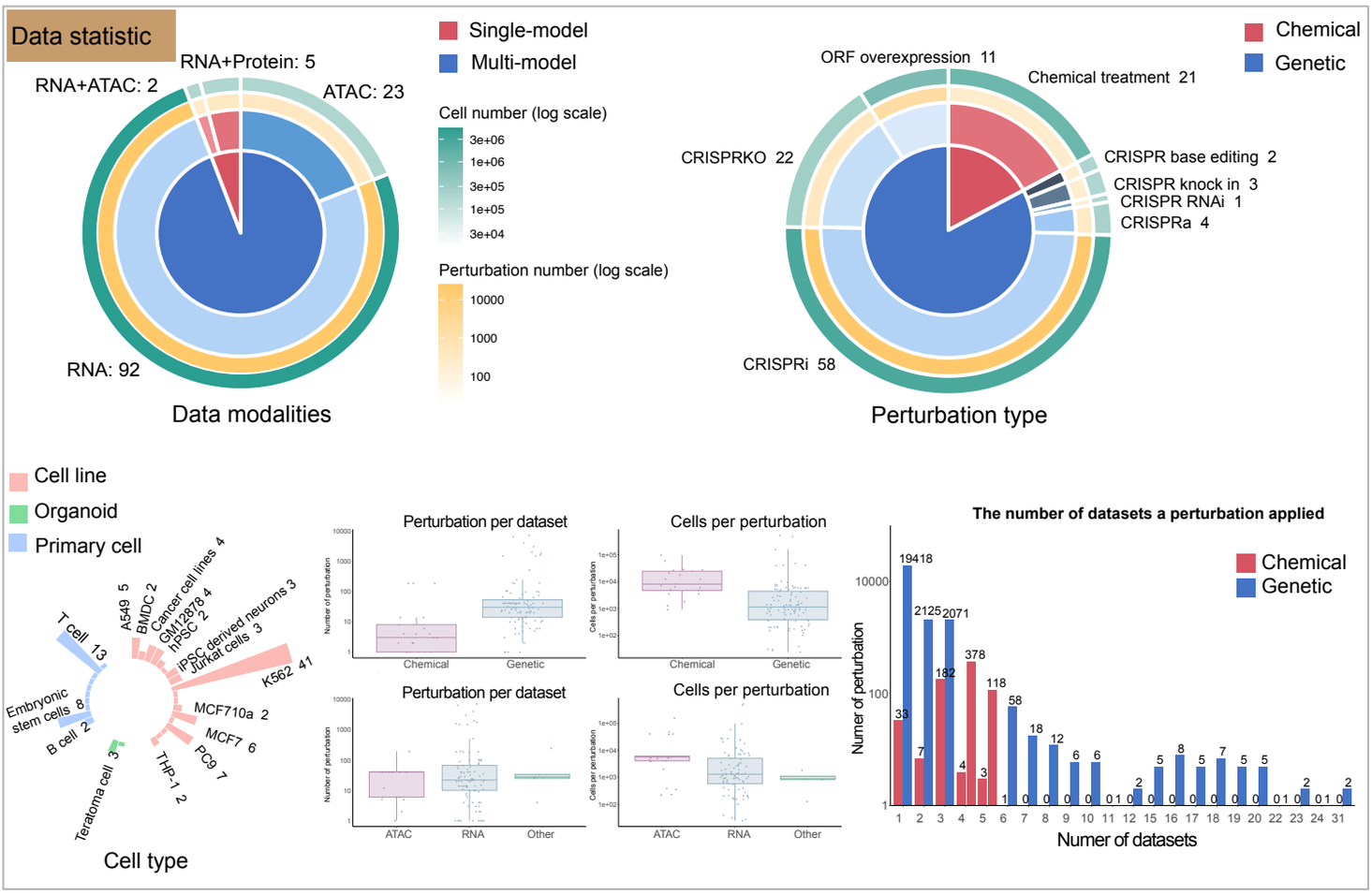
var
var_names
X
obs_names
obs

H5ad format

- ☑ 46 Studies
- ☑ 122 Datasets
- ☑ 3 Modalities
- ☑ 2 Organisms
- ☑ 31 Cell types
- ☑ 2 Perturbation types
- ☑ 24484 Perturbations
- ☑ ~6M Cells

B

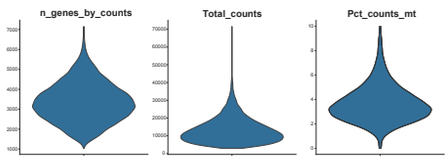
## Data statistic



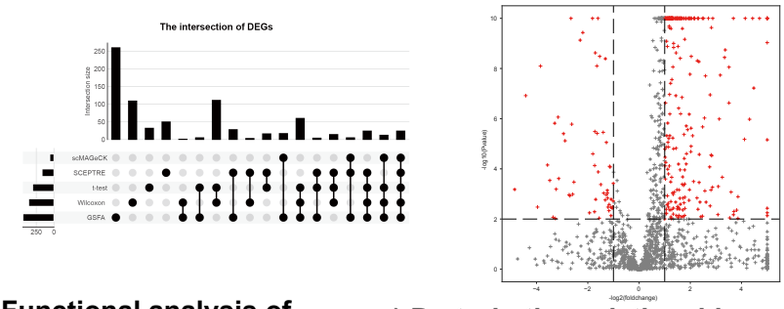

C

## Analysis module overview

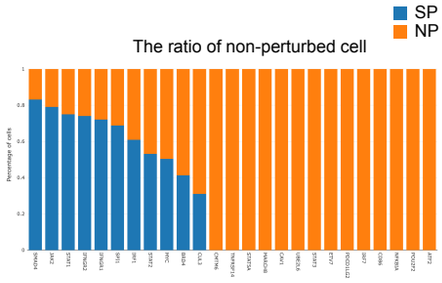
### i) Quality control



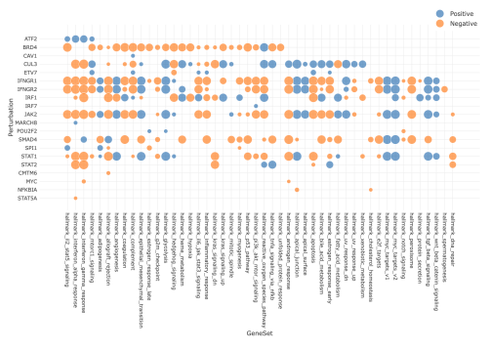

### iii) Differential gene expression analysis

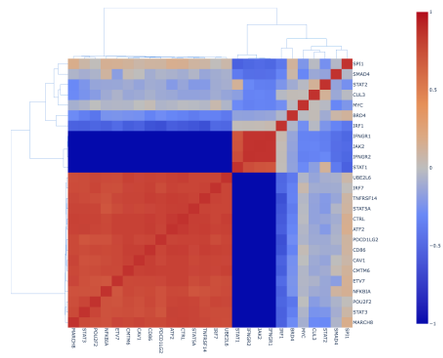



### ii) Data denoising




### iv) Functional analysis of perturbation effect




### v) Perturbation relationship analysis