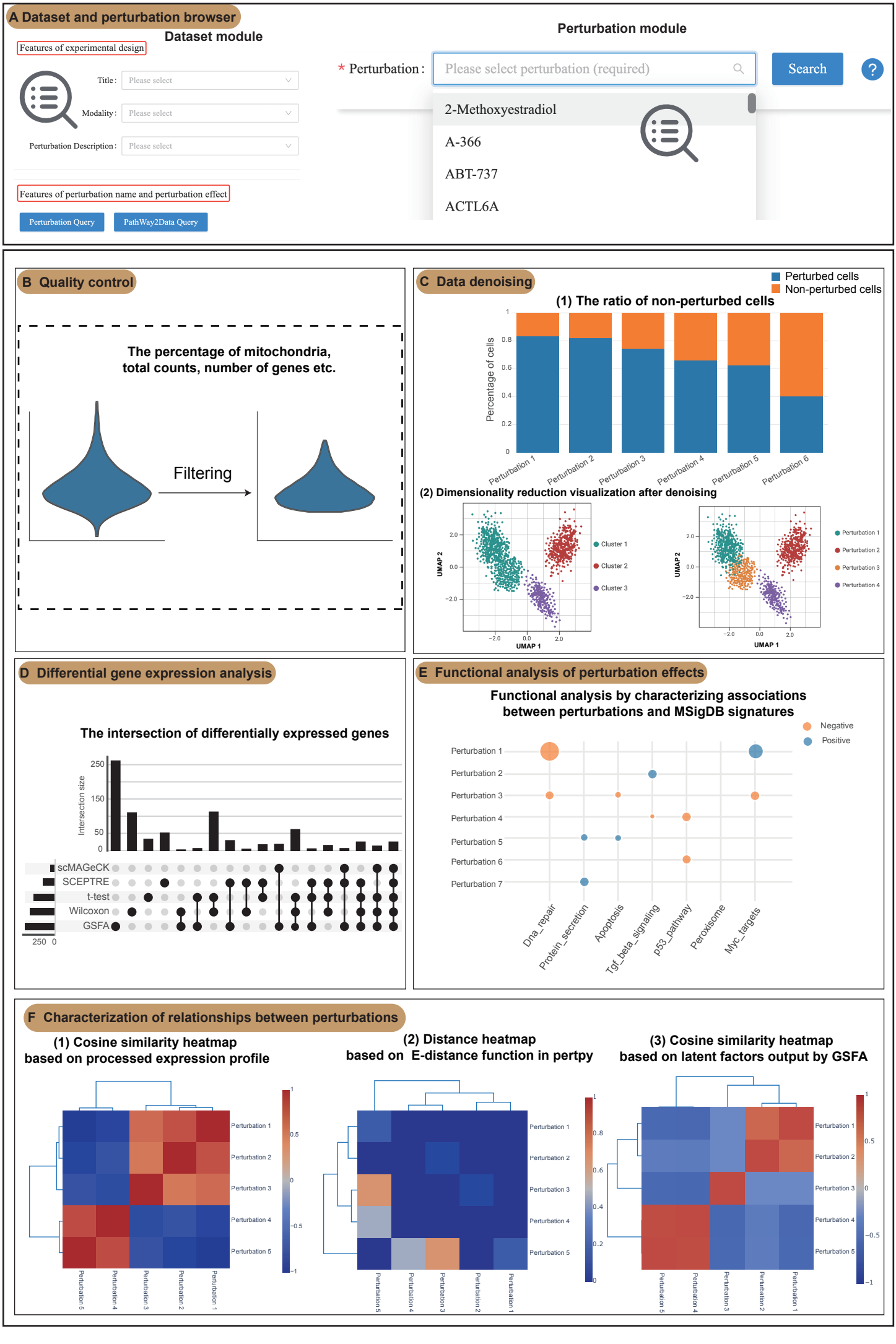
A Dataset and perturbation browser
Dataset module
Features of experimental design
Title :
Please select
Modality :
Please select
Perturbation Description :
Please select
Features of perturbation name and perturbation effect
Perturbation Query
PathWay2Data Query
Perturbation module
* Perturbation :
Please select perturbation (required)
Search
2-Methoxyestradiol
A-366
ABT-737
ACTL6A
B Quality control
The percentage of mitochondria,
total counts, number of genes etc.
Filtering
C Data denoising
Perturbed cells
Non-perturbed cells
(1) The ratio of non-perturbed cells
Percentage of cells
Perturbation 1
Perturbation 2
Perturbation 3
Perturbation 4
Perturbation 5
Perturbation 6
(2) Dimensionality reduction visualization after denoising
UMAP 2
UMAP 1
Cluster 1
Cluster 2
Cluster 3
Perturbation 1
Perturbation 2
Perturbation 3
Perturbation 4
D Differential gene expression analysis
The intersection of differentially expressed genes
Intersection size
scMAGeCK
SCEPTRE
t-test
Wilcoxon
GSFA
E Functional analysis of perturbation effects
Functional analysis by characterizing associations
between perturbations and MSigDB signatures
Negative
Positive
Perturbation 1
Perturbation 2
Perturbation 3
Perturbation 4
Perturbation 5
Perturbation 6
Perturbation 7
Dna_repair
Protein_secretion
Apoptosis
Tgf_beta_signaling
p53_pathway
Peroxisome
Myc_targets
F Characterization of relationships between perturbations
(1) Cosine similarity heatmap
based on processed expression profile
(2) Distance heatmap
based on E-distance function in pertpy
(3) Cosine similarity heatmap
based on latent factors output by GSFA