(A) Table: Dataset overview

Dataset (cell line)	Size (Genes × Cells)	Perturbations
Norman (K562)	$19\,264 \times 84\,143$	124 double and 100 single perturbations
Replogle (K562)	$5\,000 \times 162\,264$	1 087 single perturbations
Replogle (RPE1)	$5\,000 \times 161\,423$	1 534 single perturbations
Adamson (K562)	$5\,060 \times 65\,899$	81 single perturbations

(B) UMAP of the datasets

Norman   Replogle K562   Replogle RPE1   Adamson

• No Perturbation   • Single Perturbation   • Double Perturbation
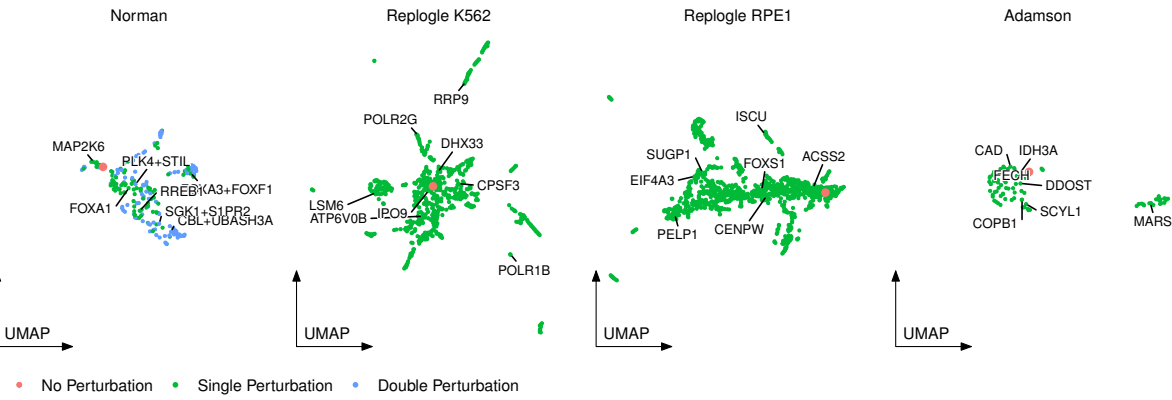
(C) Change of perturbation target gene expression