catcheR filtercatch

Choose thresholds for UMIs per UCI and percentage of UMIs

↓ *Determine valid UCIs*
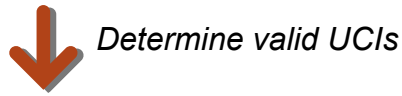
UMIs of top UCI / UMIs of second top UCI > 5

↓ *Determine valid cells (with only 1 valid UCI)*
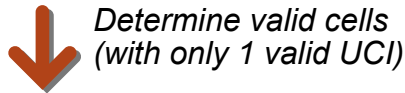
csv → Filtered cell list

Count matrix

catcheR nocatch

↙ Cells with no valid UCI

↘ Annotated count matrix

csv

↓ *filter for cells containing empty plasmid*
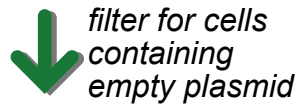
Gene expression matrix of empty cells

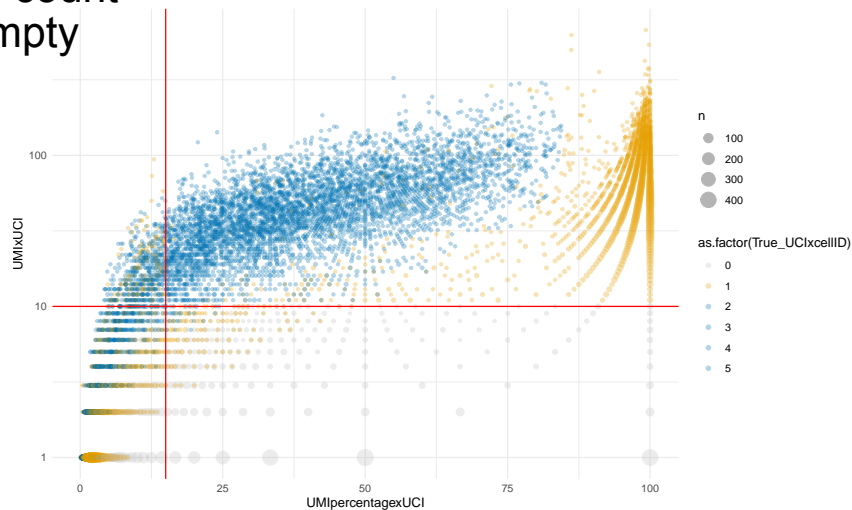**csv** →

Count matrix

↓ *Add matrix of annotated cells*
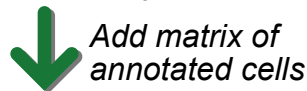
Complete annotated count matrix with also empty

csv

Two-dimensional plots showing the distribution of the percentage of UMIs supporting a UCI over the total UMIs of UCIs in the same cell and the distribution of the number of UMIs supporting a UCI. Selected thresholds of 10 UMIs and 15% are shown.

Above, colors represent the number of robust integrations in the cell: grey for cells with no robust integration, yellow for cells with one robust integration and blue for cells with multiple integrations. Below, colors represent if the cell integration is part of a valid cell or of a cell that will be filtered out.