Dear all,

The objective is to show more relevant signals arriving from different cell types to Satellite Cell Receptors, during injury and regeneration, in homeostasis. We have 6 cell types, sampled at 4 days : D0 no injury, D2 post injury, and D4 and D7.

I extracted, for each cell type, top 15 ligands exhibiting most variable TPM expression values across time points. Then I recovered their associated receptors in Satellite Cells and respective Ligand-Receptor pairs’ « edges »weights (4 values, one per day). Each edge is simply the product TPM\_ligand \* TPM\_receptor.

Finally, I picked, for each ligand, most variable weight edges. When only one day weight was available, then top highest weights were selected. This allowed to obtain most relevant (or variable) L-R pairs involving Satellite Cells receptors.

.csv file contains weights across days . When no weight was available for a given day, it was attributed -1.

.pdf is the heatmap associated to .csv file. Please note it is in logarithmic scale. As log10(-1) is undetermined, there are blanks, which corresponds to the absence of that measure at that day.

Sincerely yours,

johaGL, 2021

Le Grand Team