log2(1+FPKM) Global 500 genes most variable driving PC 1 Replicate Replicate 10 stage tissue 8 Col17a1 stage Krt14 6 Krt17 Fxyd3 4 Tacstd2 2 Dsp tissue Irf6 0 Lamc2 Wnt7b Krt5 Sfn Trim29 Igfbp5 Bcam Adamts18 Pdgfa Cldn7 Sp8 Wnt7a Itga3 Ap1m2 Lad1 Cldn6 Sp6 Fgf8 Krt18 DIx3 Spint1 Dlx2 Pltp Arhgef19 Kremen2 Krt7 DIx1 Jag2 Esrp1 Fermt1 Lama5 En1 Cdh1 Cldn4 Wnt6 Gjb3 Perp Trp63 Bhlha9 **Epcam** Hspb1 St14 Sost Hoxd13 Col15a1 Sparcl1 Hbb-bs Hbb-bt Hba-x Hbb-bh1 Asb4 Hoxd10 Tbx15 Pf4 Hand2 Mecom Lhx9 Lhx2 Tmem119 Cdh11 Vcam1 Cped1 Hoxa10 Zic2 Snai1 Nid2 Adgra2 Prrx2 Twist1 Nid1 Tbx5 Ddr2 Prrx1 Fgf10 Cd34 Kdr Plxnd1 Cldn5 Plvap Esam Ramp2 Ets1 **Emcn** Kcne3 ApInr Cdh5 Pecam1 Eng Tie1 Hbb-y Hba-a1 Slc4a1 Alas2 MES125_R2
MES125_R1
MES115_R2
MES115_R2
MES105_R2
MES095_R2
MES095_R1
ECT125_R2
ECT115_R2
ECT105_R2
ECT105_R2
ECT105_R2
ECT095_R1

1

2

E9.5

E10.5

E11.5

E12.5

ECT

MES