

**S4 Table. Cluster Annotation of Deng data analysis using 48 genes with top driving gene summaries.**

Cluster	Top 5 Driving Genes	Top significant GO terms (function)[q-value]
Green	<i>Actb</i>	GO:0048568 (embryonic organ development)[9e-08], GO:0048468 (cell development)[4e-07], GO:0001890 (placenta development)[1e-06], GO:0051094 (positive regulation of developmental process)[1e-06], GO:0030097 (hemopoiesis)[1e-05]
Purple	<i>Pecam1, Esrrb, Fn1, Pdgfra, Sox2</i>	GO:0048864 (stem cell development)[4e-12], GO:0048863 (stem cell differentiation)[2e-11], GO:0009893 (positive regulation of metabolic process)[7e-10], GO:0009653 (anatomical structure morphogenesis)[4e-08]
Orange	<i>Dppa1, Gata3, Id2, Dab2, Lcp1</i>	GO:0061061 (muscle structure development)[2e-13], GO:0060537 (muscle tissue development)[2e-12], GO:0048514 (blood vessel morphogenesis)[8e-12], GO:0007275 (multicellular organismal development)