

Description of Additional Supplementary Files

File Name: **Supplementary Data 1 – Quality Control**

Description: Summary of quality metrics for single-cell libraries analyzed.

File Name: **Supplementary Data 2 – Differential Gene Analysis complete**

Description: Differentially-expressed genes (two-sided unpaired Wilcoxon rank sum test) for the complete dataset, EndMT and EpiMT subsets, and the Sox9 cKO data.

File Name: **Supplementary Data 3 - Batch Effect Genes**

Description: Batch-associated genes (two-sided unpaired Wilcoxon rank sum test) and gene ontology analysis.

File Name: **Supplementary Data 4 - Gene lists for profile analysis**

Description: Genes used for endothelial, mesenchymal, epicardial, and fluid shear stress gene profile analysis.

File Name: **Supplementary Data 5 - Cell signaling analysis supplementary tables**

Description: Complete NicheNet data.

File Name: **Supplementary Data 6 - Reagents and Resources**

Description: Detailed list of reagents and resources, including antibody information, used in this manuscript.

File Name: **Supplementary Data 7 - Genotyping primers**

Description: List of primers used for genotyping.

File Name: **Supplementary Data 8 - Gene lists for NicheNet analysis**

Description: Target genes of interest for NicheNet analysis.