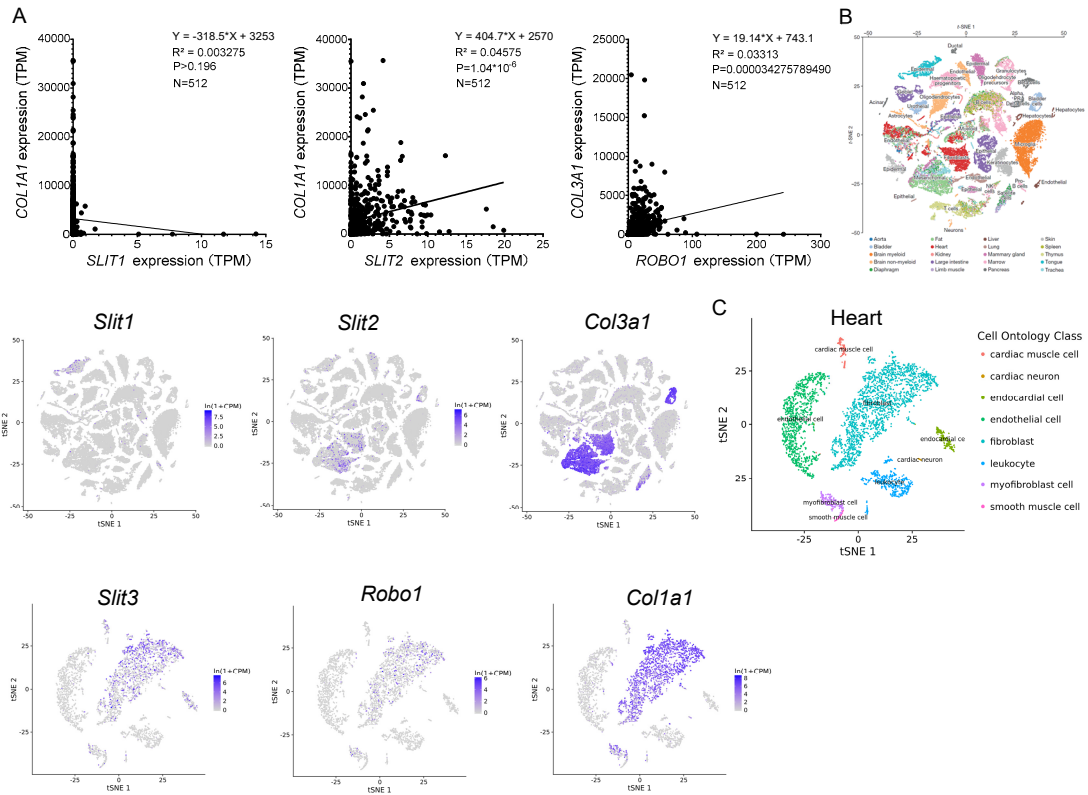
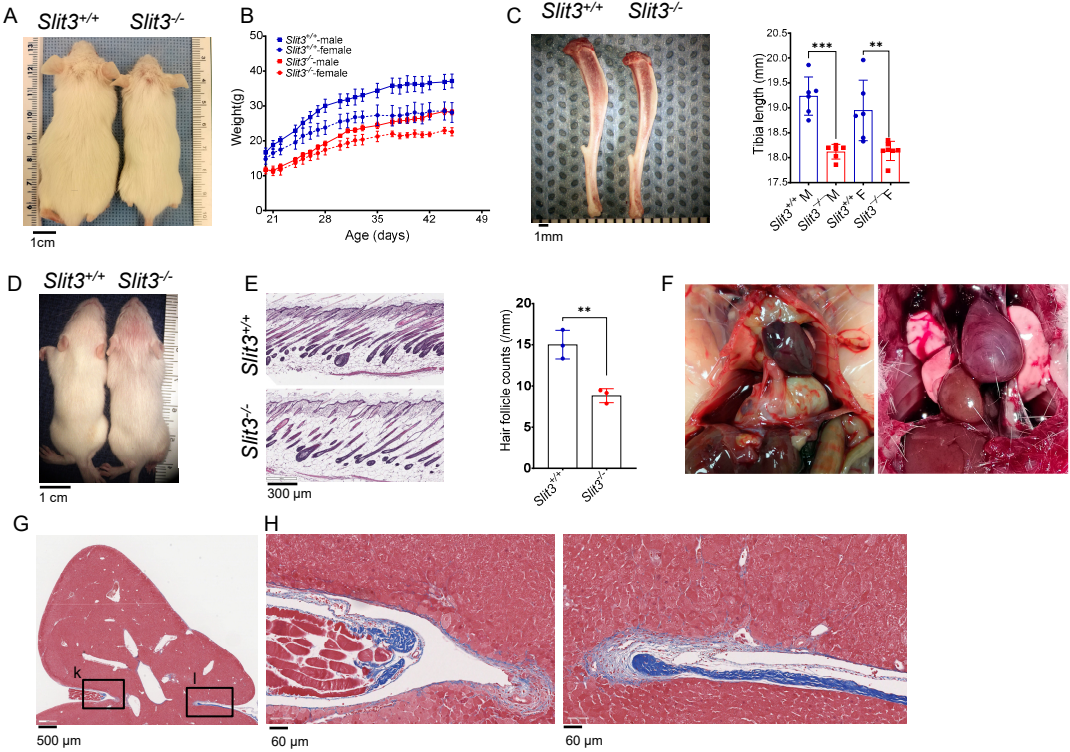
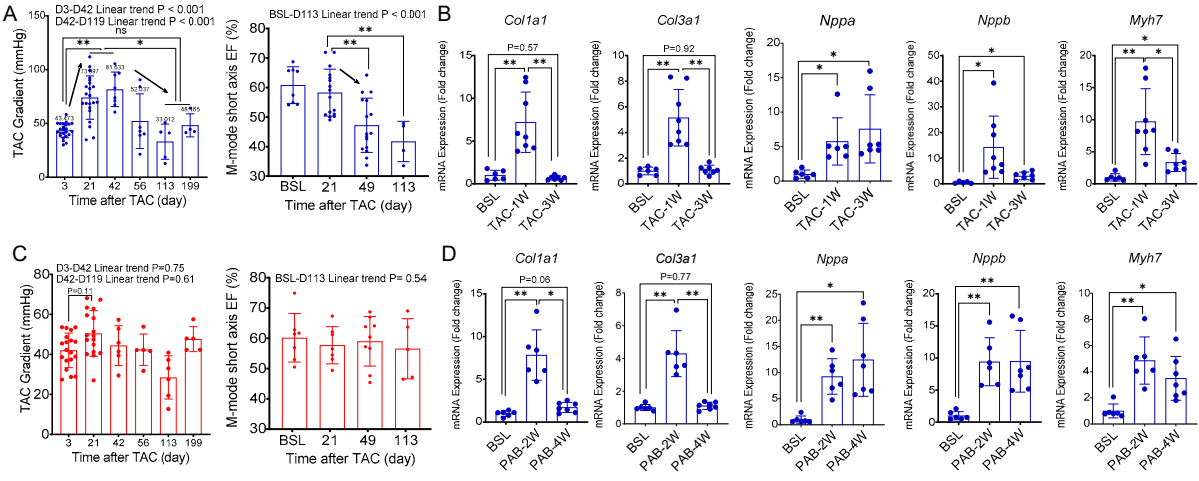


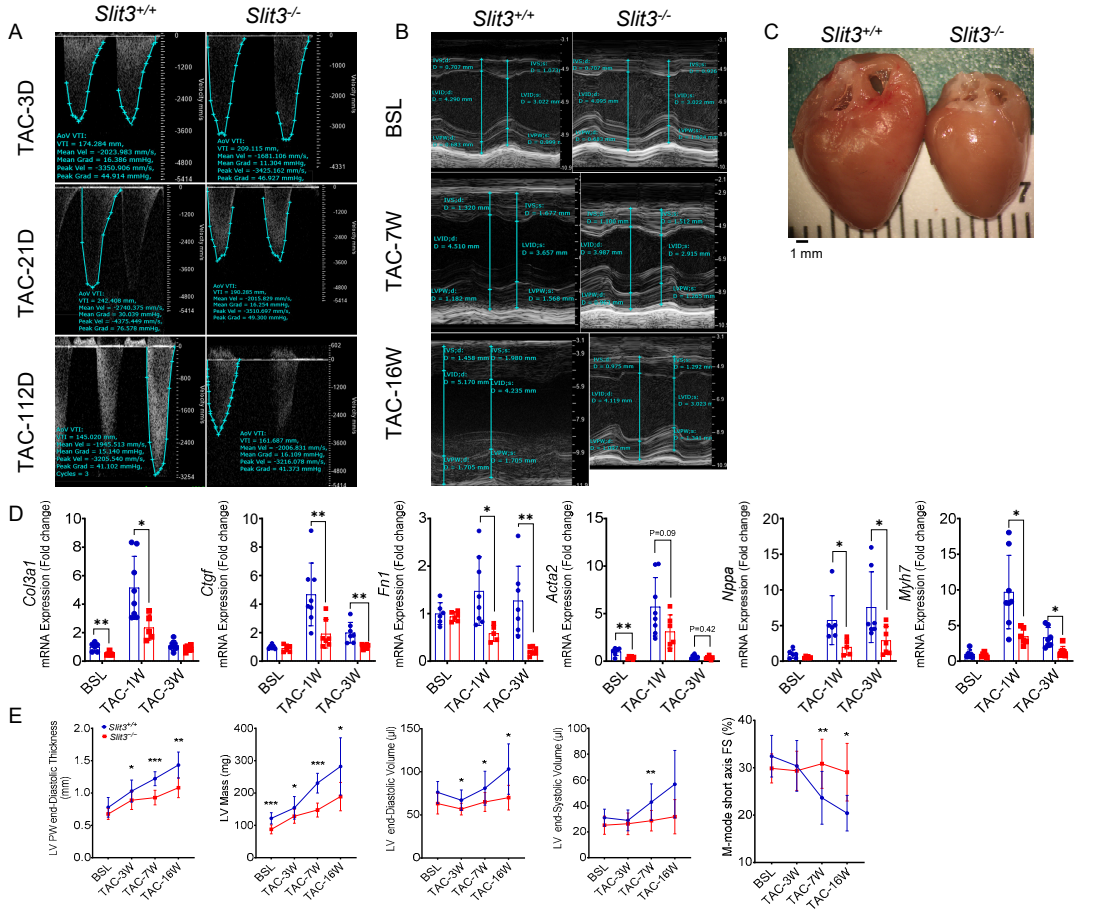
Supplemental Figure 1. SLIT3 is present at high levels in fibrillar collagen-producing cells. (**A**) Linear regression analysis between the transcript levels of *SLIT1* and *COL1A1*, *SLIT2* and *COL1A1, ROBO1* and *COL3A1* across 512 cell lines from the FANTOM 5 project. Transcripts per million, TPM. (**B**) Single cell transcriptome data from the Tabula Muris project. t-SNE plot of all cells collected by FACS, colored by organ, overlaid with the predominant cell type composing each cluster (n = 44,949 individual cells from 20 mouse organs) and the clusters of cells expressing *Slit1, Slit2*, *Col3a1*. (**C**) Cells for heart visualized with t-SNE, colored by cell type, and the clusters of cells expressing *Slit3* , *Robo1* , and *Col1a1* .



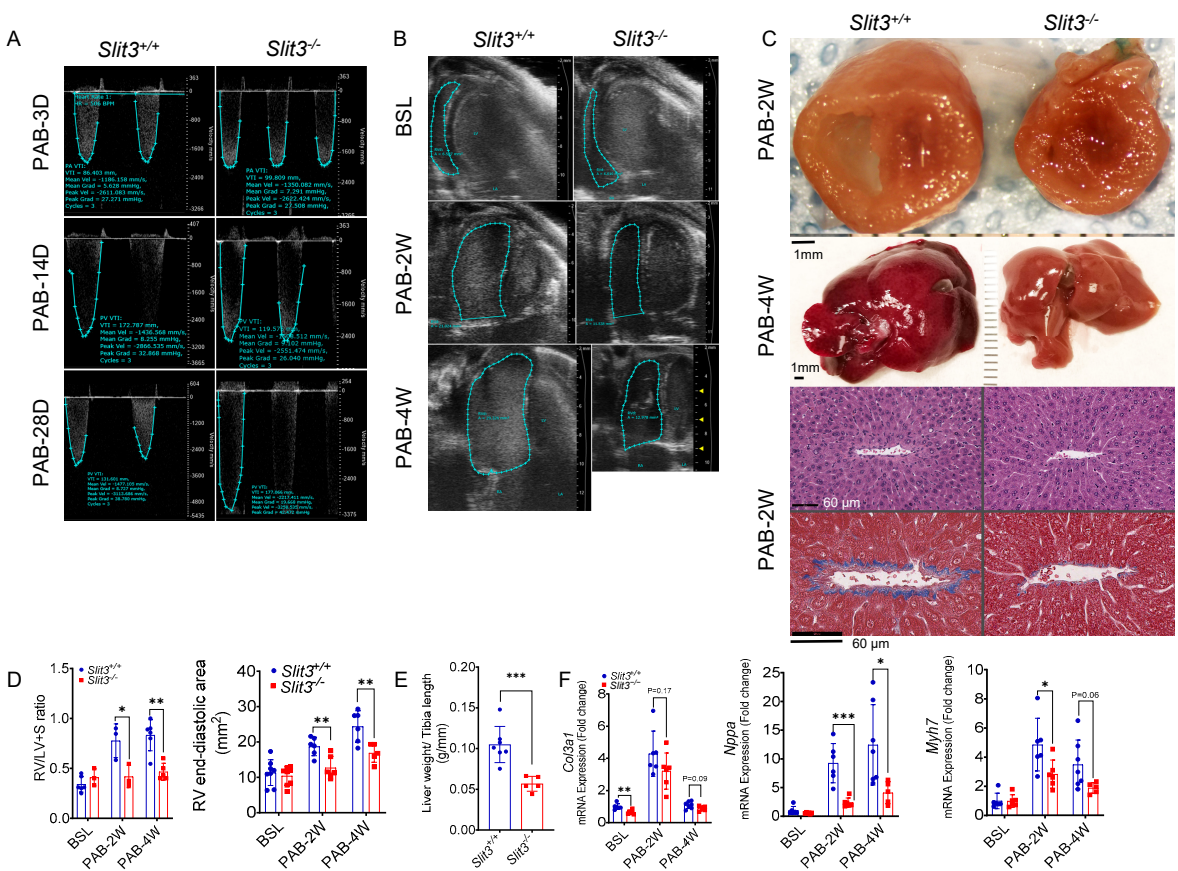
Supplemental Figure 2. Phenotypic manifestations of *Slit3*$^{-/-}$ CD1 mice. (**A**) Representative image of 21-day-old mice. Scale bar, 1cm. (**B**) Quantification of body weight in 3-7 weeks old *Slit3*$^{-/-}$ and WT mice (*Slit3*$^{+/+}$ n=11, F=6, M=5; *Slit3*$^{-/-}$ n=9, F=4, M=5) . (**C**) Representative image of tibia (male) and quantification of tibia length in 8-week-old *Slit3*$^{-/-}$ and WT mice (n=6 per group). Scale bar, 1mm. (**D**) Representative image of hair follicle density in weight-matched 12-day-old *Slit3*$^{-/-}$ and WT male mice. Scale bar 1cm. (**E**) Representative histological longitudinal sections (haematoxylin and eosin stain) and quantification of hair follicle density in dorsal skin in 10-day-old male mice (n=3 per group). Scale bar, 300 µm. (**F**) Representative images of central congenital diaphragmatic hernia (CDH) in *Slit3*$^{-/-}$ mice. From left to right, stomach or liver in hernia sac. (**G**) Sagittal Masson's trichrome-stained section of a central CDH (liver in hernia sac) in a 10-week-old male mouse. Scale bar, 500 µm. (**H**) Higher-magnification views of the boxed areas indicated in **G**. Scale bar, 60 µm. Data are presented as mean±SD. Number (n), male (M), female (F). *P < 0.05, **P < 0.01, ***P < 0.001 vs. WT mice using the unpaired two-tailed Student's t-test.



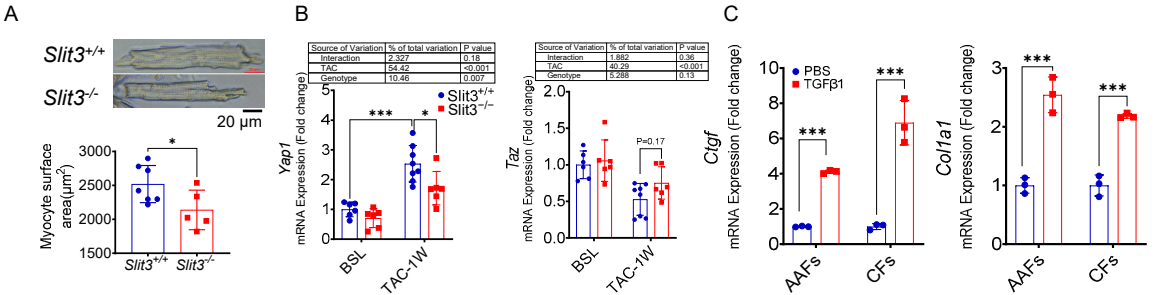
Supplemental Figure 3. TAC or PAB peak pressure gradient and the expression levels of cardiac remodeling-related genes. (**A, C**) TAC peak pressure gradient and LV ejection fraction (EF) determined by echocardiography in WT (A) and *Slit3*$^{-/-}$ mice (C) after surgery (n=4-24 per group). (**B, D**) Transcript levels of *Col1a1*, *Col3a1*, *Nppa, Nppb*, *and Myh7* by real-time qPCR in WT mice in the LV before and at 1 and 3 weeks after TAC (B), as well as in the RV before and at 2 and 4 weeks after PAB (D) (n=6-8 per group). (**E, F**) Transcript levels of *Col1a1* and *Col3a1* by real-time qPCR in *Slit3*$^{-/-}$ and WT mice in the LV before and at 1 week after TAC (E), as well as in the RV before and at 2 weeks after PAB (F) (n=5-8 per group). (**G**) Linear regression analysis between aortic peak gradient and LV mass in *Slit3*$^{-/-}$ and WT mice at 3 and 21 days after TAC (n=54). BSL: 7-9 weeks old baseline mice before surgery. Data are presented as mean±SD. Number (n). *P < 0.05, **P < 0.01 using the ordinary or Brown-Forsythe and Welch one-way ANOVA with Tamhane T2 multiple comparisons test (A-D), and two-way ANOVA with Tukey multiple comparisons test (E-F).



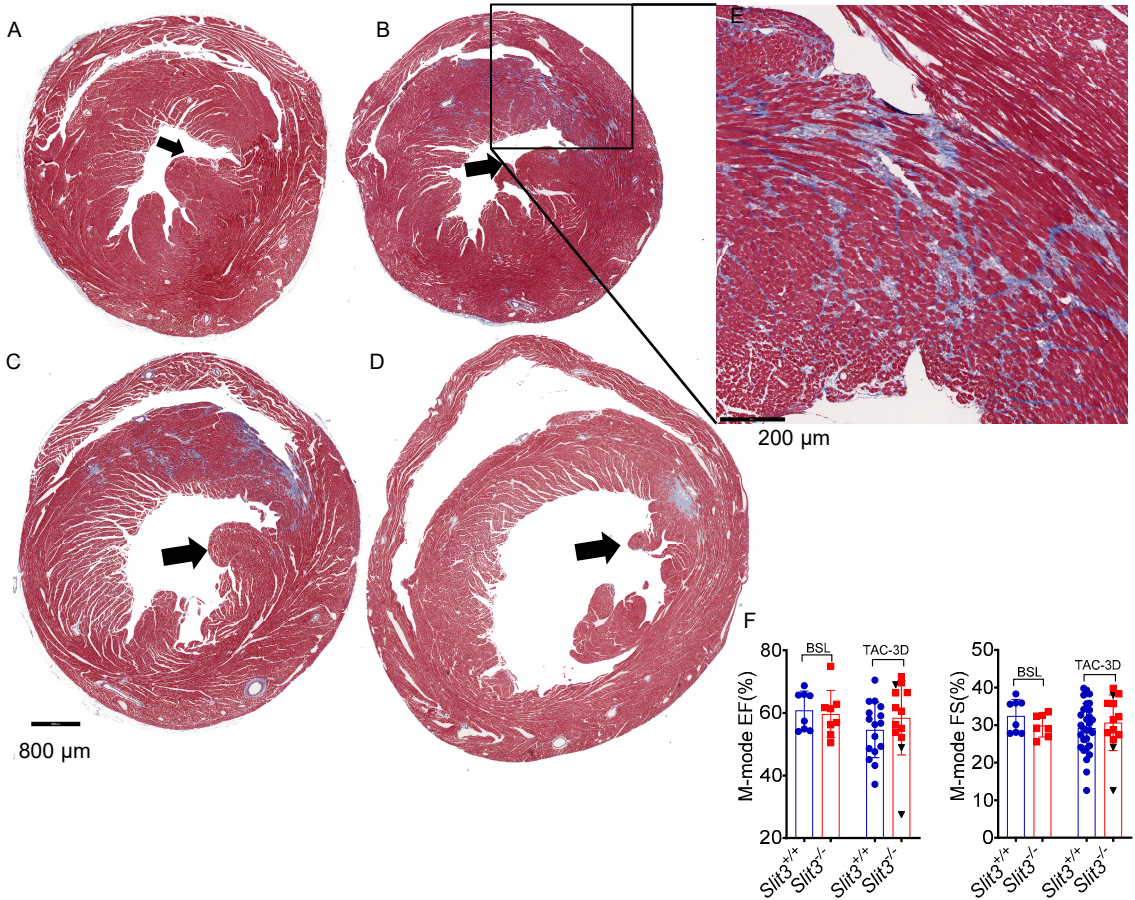
Supplemental Figure 4. SLIT3 deficiency attenuates LV fibrosis and adverse remodeling. (**A**) Representative images of TAC peak pressure gradient determined by echocardiography in *Slit3*$^{-/-}$ and WT mice at 3, 21, 112 days after surgery. (**B**) Representative images of M-mode parasternal short-axis echocardiogram in *Slit3*$^{-/-}$ and WT mice before and at 7 and 16 weeks after TAC. (**C**) Representative images of heart in *Slit3*$^{-/-}$ and WT mice at 1 year after TAC. (**D**) Transcript levels of *Col3a1, Ctgf , Fn1*, *Acta2*, *Nppa, Myh7* and in the LV by real-time qPCR in *Slit3*$^{-/-}$ and WT mice before and at 1 and 3 weeks after TAC (n=6-8 per group). (**E**) LV posterior wall end-diastolic thickness, mass, end-diastolic volume, end-systolic volume, and M-mode short axis fractional shortening (FS) determined by echocardiography in *Slit3*$^{-/-}$ and WT mice before and at 3, 7, and 16 weeks after TAC (n=6-8 per group). Scale bar, 1mm BSL: 7-9 weeks old baseline mice before surgery. Data are presented as mean±SD. Number (n). *P < 0.05, **P < 0.01, ***P < 0.001 vs. WT mice using the unpaired two-tailed Student's t-test.



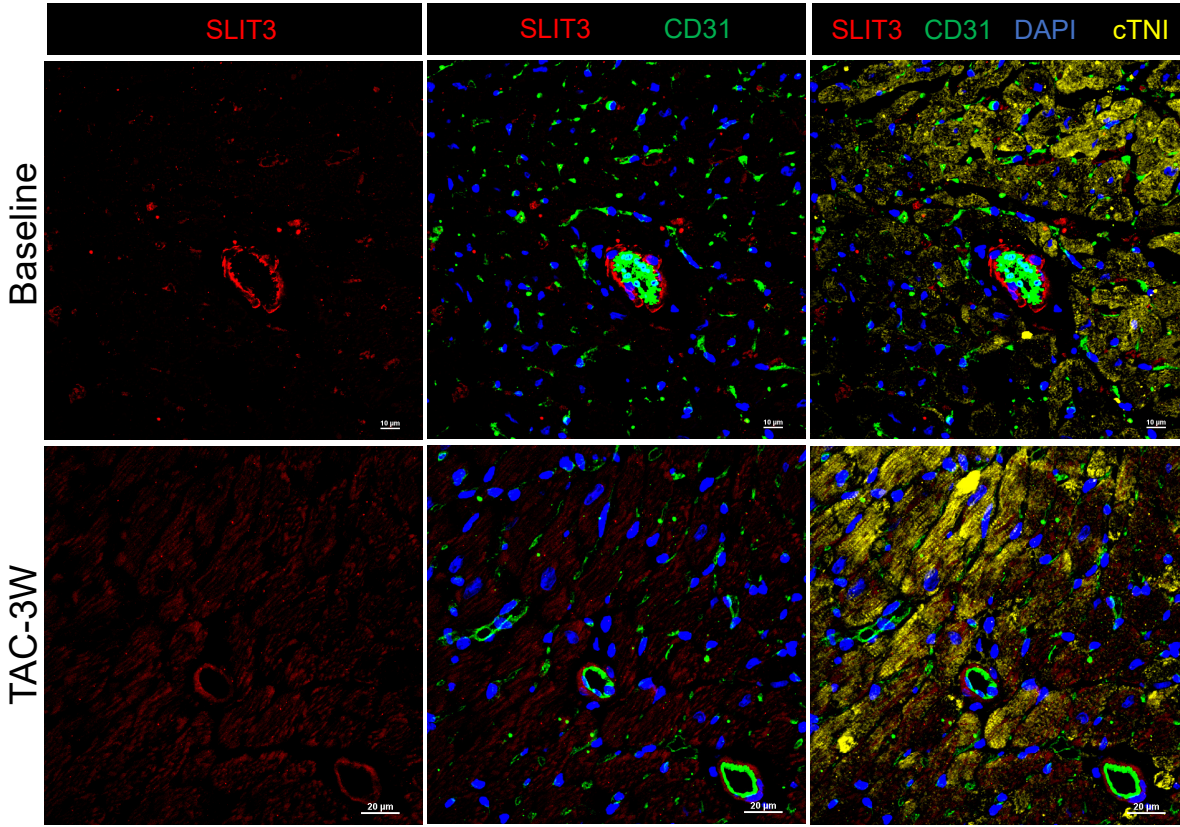
Supplemental Figure 5. SLIT3 deficiency attenuates RV fibrosis and adverse remodeling. (**A**) Representative images of PAB peak pressure gradient determined by echocardiography in *Slit3*$^{-/-}$ and WT mice at 3, 14 and 28 days after PAB. (**B**) Representative images of RV end-diastolic area determined by echocardiography in *Slit3*$^{-/-}$ and WT mice before and at 2 and 4 weeks after PAB. (**C**) Representative images of short-axis cross sectional view of the heart and liver morphology, and histological sections of central vein in liver tissue (third row, haematoxylin and eosin stain and fourth row, Masson's trichrome stain) in *Slit3*$^{-/-}$ and WT mice at 2 or 4 weeks after PAB. Scale bar, 1 mm and 60 μm from top to bottom. (**D**) Quantification of right ventricular weight-to-left ventricular plus septum weight ratio (RV/LV+S) and RV end-diastolic area in *Slit3*$^{-/-}$ and WT mice before and at 2 and 4 weeks after PAB (n=3-7 per group). (**E**) Quantification of liver weight/ tibia length in *Slit3*$^{-/-}$ and WT mice at 4 weeks after PAB (n=5-7 per group). (**F**) Transcript levels of *Col3a1*, *Nppa*, and *Myh7* in the RV by real-time qPCR in *Slit3*$^{-/-}$ and WT mice before and at 2 and 4 weeks after PAB (n=6 per group). BSL: 7-9 weeks old baseline mice before surgery. Data are presented as mean±SD. Number (n). *P < 0.05, **P < 0.01, ***P < 0.001 vs. WT mice using the unpaired two-tailed Student's t-test.



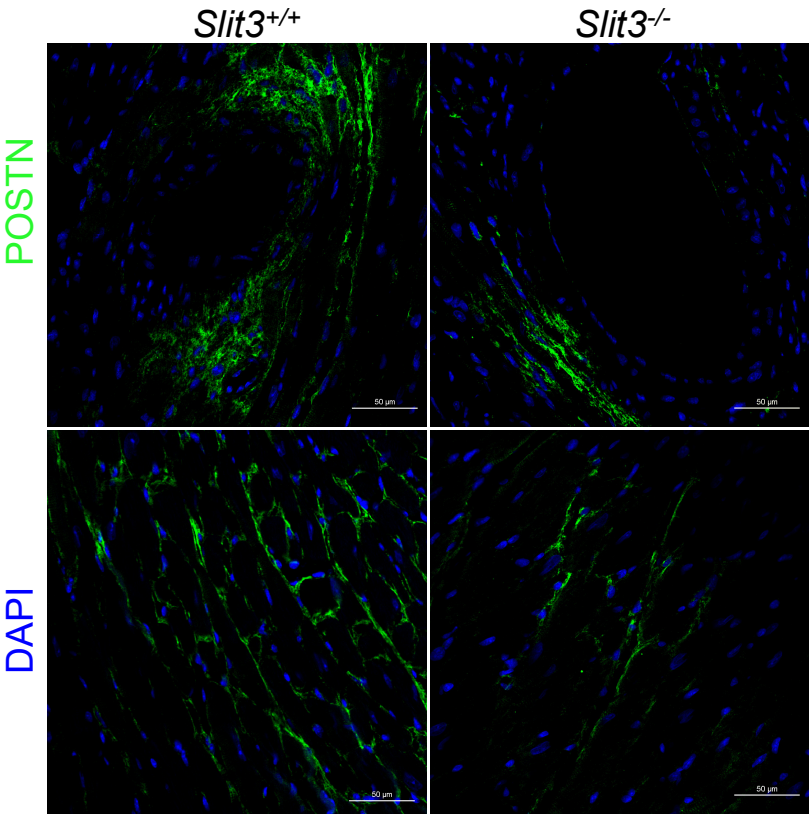
Supplemental Figure 6. (**A**) Representative microscopic images and quantification of isolated myocyte surface area in 8-12 weeks old, body weight close to 30g *Slit3*$^{-/-}$ and WT mice (n=5-7 per group). Scale bars, 20 μm. (**B**) Transcript levels of *Yap1* and *Taz* in the LV by real-time qPCR in *Slit3*$^{-/-}$ and WT mice before and at 1 week after TAC (n=6-8 per group). (**C**) Transcript levels of *Ctgf* and *Col1a1* by real-time qPCR in WT AAFs and CFs cultured in PBS or TGFβ1 (5.0 ng/ml) added collagen gel (1mg/ml collagen type I, 0.5% FBS) for 24 hours (n = 3 per group). Data are presented as mean±SD. In vitro experiments were performed at least 3 times independently. *P < 0.05, **P < 0.01, ***P < 0.001 vs. WT mice or cells using the unpaired two-tailed Student's t-test (A, C), and two-way ANOVA with Tukey multiple comparisons test (B).



Supplemental Figure 7. (**A-D**) Representative histological transverse sections of whole heart (Masson's trichrome stain) in *Slit3*$^{-/-}$ mice at 3 (A-C) and 8 (D) weeks after transverse aortic constriction (TAC). The black arrows indicate the position of posteromedial papillary muscle (PPM). Scale bars, 800 µm. (**E**) Higher-magnification view of the boxed area indicated in B. Scale bar, 200 µm. (**F**) LV ejection fraction (EF) and fractional shortening (FS) determined by echocardiography in *Slit3*$^{-/-}$ and WT mice before and at day 3 after TAC. The three black triangles in *Slit3*$^{-/-}$ mice group represent three hearts with ventricular septal scars, as shown on the left. (n=8-16 per group). BSL: 7-9 weeks old baseline mice before surgery. Data are presented as mean±SD. Number (n). Using the ordinary one-way ANOVA with Tamhane T2 multiple comparisons test (F).



Supplemental Figure 8. Representative confocal immunofluorescence images of mouse cardiac tissue before and 3 weeks after TAC stained with SLIT3 (green), CD31 (green), DAPI (blue), and cTNI (yellow). (n=3 per group). Scale bars, 10 μm and 20 μm from top to bottom.



Supplemental Figure 9. Representative confocal immunofluorescence images of mouse cardiac tissue 8 weeks after TAC stained with POSTN (green) and DAPI (blue). (n=3 per group). Scale bars, 50 µm.

Supplemental Table 1

Sample	SLIT1	SLIT2	SLIT3	ROBO1	ROBO2	ROBO3	ROBO4	COL1A1	COL3A1
Adipocyte - breast, donor1.CNhs11051.11376-118A8	0	2.5434973	185.6753037	16.3510541	3.8152459	1.6351054	0.1816784	7013.87551	4274.710586
Adipocyte - breast, donor2.CNhs11969.11327-117E4	0	5.1384125	202.5390958	14.9870367	1.4987037	1.0705026	0.2141005	6510.796931	2677.541152
Adipocyte - omental, donor1.CNhs11054.11473-119C6	0	3.6648145	200.578117	14.9411668	0.8457264	2.6781336	0	10972.31368	5847.775363
Adipocyte - omental, donor2.CNhs12067.11474-119C7	0	6.004398	191.14	7.005131	9.006597	0	1.000733	7668.616858	3962.902615
Adipocyte - omental, donor3.CNhs12068.11475-119C8	0	3.5756888	153.3076554	12.0679496	0	0.8939222	0	11880.67784	9302.601258
Adipocyte - perirenal, donor1.CNhs12069.11476-119C9	0	0	186.6804441	3.4893541	0	1.744677	0	6781.559686	3375.950088
Adipocyte - subcutaneous, donor1.CNhs12494.11259-116F8	0	0	30.395986	20.26399	0	0	0	10147.19312	2641.91773
Adipocyte - subcutaneous, donor2.CNhs11371.11336-117F4	0	1.2634398	75.1746649	24.6370751	0	0.6317199	1.2634397	559.7038076	514.2199769
Adipocyte - subcutaneous, donor3.CNhs12017.11408-118E4	0	1.8282994	243.6861913	13.0592814	0.2611856	2.3506706	0.5223713	367.4881787	805.2352918
Alveolar Epithelial Cells, donor1.CNhs11325.11510-119G7	0	0.7372018	1.4744036	3.4402751	0.4914679	15.235504	1.7201376	464.1914059	70.77137
Alveolar Epithelial Cells, donor2.CNhs12084.11590-120G6	0	0	0.6978012	2.7912047	0.6978012	27.2142455	3.4890058	275.6314614	2.093404
Alveolar Epithelial Cells, donor3.CNhs12119.11671-122G6	0	0	3.129887	6.259774	3.129887	37.558644	9.389661	1968.698923	247.2611
Amniotic Epithelial Cells, donor1.CNhs11341.11533-120A3	0	19.8781649	15.9462202	10.4851859	0	19.441282	0.2184414	769.1320717	1320.478095
Amniotic Epithelial Cells, donor2.CNhs12098.11613-122A2	0	17.616304	28.186088	10.569783	0	14.093044	0	5122.821307	2660.061957
Amniotic Epithelial Cells, donor3.CNhs12125.11694-123A2	0	5.539107	22.156427	6.066641	0	19.782524	0	5632.216287	2238.854111
amniotic membrane cells, donor1.CNhs12502.12235-129G3	0	6.2073566	3.3424229	1.6712114	0.2387445	1.6712115	0.2387445	284.5834262	1303.306142
amniotic membrane cells, donor2.CNhs12503.12236-129G4	0.2969647	12.7694813	4.4544703	6.2362584	0.2969647	4.4544702	0	517.9064035	5121.74985
amniotic membrane cells, donor3.CNhs12379.12237-129G5	0	8.6004997	2.7644463	1.5358035	0	6.4503747	0	38.7022484	764.5229874
Anulus Pulposus Cell, donor1.CNhs10876.11248-116E6	0	0.6188318	0.1237664	48.5164103	0.9901309	11.88157	0.8663645	1247.564838	1818.99409
Anulus Pulposus Cell, donor2.CNhs12064.11463-119B5	0	0.6627948	4.970961	42.7502616	1.3255895	7.9535371	0.6627948	4748.2616	1769.993384
Astrocyte - cerebellum, donor1.CNhs11321.11500-119F6	0.2462421	0.4924843	17.2369482	10.9577742	0.3693632	19.0837639	4.5554792	2629.8658	29.05657
Astrocyte - cerebellum, donor2.CNhs12081.11580-120F5	0	0.4080014	17.3400588	11.6280394	0.2040007	25.9080878	8.3640284	6075.956588	17.95206
Astrocyte - cerebellum, donor3.CNhs12117.11661-122F5	0.9403641	0.9403642	38.5549307	13.478553	0	21.9418306	4.388366	5789.195251	106.88806
Astrocyte - cerebral cortex, donor1.CNhs10864.11235-116D2	0	0	12.021912	40.073038	5.72472	7.728372	0	374.396673	41.217982
Astrocyte - cerebral cortex, donor2.CNhs11960.11316-117D2	0	0.2737489	16.424931	20.941787	1.2318698	5.8856002	0.1368744	365.5915897	6.8437212
Astrocyte - cerebral cortex, donor3.CNhs12005.11392-118C6	0	0	42.8100401	28.1215513	1.6320543	4.7706203	0.2510853	1161.520502	79.719576
Basophils, donor3.CNhs12575.12243-129H2	0.3096322	0.1548161	0.3096322	1.5481611	0.1548161	1.5481612	0.3096322	386.1114111	345.7044034
Bronchial Epithelial Cell, donor1.CNhs11327.11511-119G8	0	0	5.2473245	6.371751	0	11.2442665	0	38.2305063	0
Bronchial Epithelial Cell, donor2.CNhs12085.11591-120G7	0	0	2.39341	1.196705	1.196705	38.294558	0	186.68597	0
Bronchial Epithelial Cell, donor3.CNhs12623.11672-122G7	0	0	0	27.37672	0	27.37672	0	36.5023	0
Bronchial Epithelial Cell, donor4.CNhs12054.11453-119A4	0	0	2.7582636	4.597106	0	16.549582	0	20.2272668	0.9194212
Bronchial Epithelial Cell, donor5.CNhs12058.11457-119A8	0	0	5.1205007	7.228942	0.6024118	22.289238	0.3012059	37.6507396	0
Bronchial Epithelial Cell, donor6.CNhs12062.11461-119B3	0	0	5.916064	9.983358	0	12.94139	0	20.706224	0
Bronchial Epithelial Cell, donor7.CNhs12642.11769-123I5	0	0.2498687	4.7475052	9.744879	0	17.9905458	0	25.2367379	0.4997374
Cardiac Myocyte, donor1.CNhs12341.11525-119I4	0	2.438069	168.22674	39.009099	0	9.752275	0	10047.28096	965.475191
Cardiac Myocyte, donor2.CNhs12350.11605-120I3	0	0	14.7554191	32.1936413	0.6707009	7.3777095	8.7191112	3774.033738	2109.354204
Cardiac Myocyte, donor3.CNhs12571.11686-122I3	0	2.1736636	50.1221242	17.6450336	0.3835877	8.8225168	9.7175547	4554.208728	2453.298974
CD14+ monocyte derived endothelial progenitor cells, donor1.CNhs10858.11229-116C5	0	0	0	0	0	0.4478309	0	0	0
CD14+ monocyte derived endothelial progenitor cells, donor2.CNhs11897.11310-117C5	0	0	0	0.3238937	0	0.6477873	0	0	0
CD14+ monocyte derived endothelial progenitor cells, donor3.CNhs11904.11386-118B9	0	0	0	1.803029	0	2.0606045	0	0.2575756	0
CD14+ monocytes - mock treated, donor1.CNhs13468.11863-125A9	0	0	0	0	0	0.4361946	0	0.1453982	0.1453982
CD14+ monocytes - mock treated, donor2.CNhs13484.11873-125C1	0	0	0	0.3778759	0	0.3778759	0	0	0
CD14+ monocytes - mock treated, donor3.CNhs13491.11883-125D2	0	0	0	0	0	0.2425841	0	0	0
CD14+ monocytes - treated with BCG, donor1.CNhs13465.11860-125A6	0	0	0	0	0	0.5753848	0	0	0
CD14+ monocytes - treated with BCG, donor2.CNhs13475.11870-125B7	0	0	0.2561607	0.2561607	0	0	0	2.0492856	0.7684821
CD14+ monocytes - treated with BCG, donor3.CNhs13543.11880-125C8	0	0	0	0	0	0.4729645	0	0	0
CD14+ monocytes - treated with B-glucan, donor1.CNhs13474.11869-125B6	0	0	0	0.232429	0.232429	0.9297161	0	0.232429	0
CD14+ monocytes - treated with B-glucan, donor2.CNhs13489.11879-125C7	0	0	0	0	0	0	0	0.4111679	0
CD14+ monocytes - treated with B-glucan, donor3.CNhs13495.11889-125D8	0	0	0	0	0	0.3097064	0.3097064	0	0
CD14+ monocytes - treated with Candida, donor1.CNhs13473.11868-125B5	0	0	0	0	0	0.3447457	0	0.6894914	0
CD14+ monocytes - treated with Candida, donor2.CNhs13488.11878-125C6	0	0	0	0	0	1.2909694	0	1.2909694	0
CD14+ monocytes - treated with Candida, donor3.CNhs13494.11888-125D7	0	0	0	0	0	1.354265	0	0	0
CD14+ monocytes - treated with Cryptococcus, donor1.CNhs13472.11867-125B4	0	0	0	0	0	1.5059388	0	0.5647269	0
CD14+ monocytes - treated with Cryptococcus, donor2.CNhs13487.11877-125C5	0	0	0.2729062	0	0	0	0	0.2729062	0
CD14+ monocytes - treated with Cryptococcus, donor3.CNhs13546.11887-125D6	0	0	0	0	0	0	0	0.449447	0
CD14+ monocytes - treated with Group A streptococci, donor1.CNhs13469.11864-125B1	0	0	0	0	0	0.6121678	0	0.9182517	0
CD14+ monocytes - treated with Group A streptococci, donor2.CNhs13532.11874-125C2	0	0	0	0.320929	0	0.320929	0	0	0
CD14+ monocytes - treated with Group A streptococci, donor3.CNhs13492.11884-125D3	0	0	0	0	0	0.6393371	0	0.6393371	0
CD14+ monocytes - treated with IFN + N-hexane, donor1.CNhs13466.11861-125A7	0	0	0	0	0	0	0	0	0
CD14+ monocytes - treated with IFN + N-hexane, donor2.CNhs13476.11871-125B8	0	0	0	0.3989273	0	0.3989274	0	0.1994637	0
CD14+ monocytes - treated with IFN + N-hexane, donor3.CNhs13490.11881-125C9	0	0	0	0	0	0	0	0	0
CD14+ monocytes - treated with lipopolysaccharide, donor1.CNhs13470.11865-125B2	0.6053995	0.6053995	10.897191	3.0269975	1.210799	1.210799	1.210799	461.3144209	252.4516
CD14+ monocytes - treated with lipopolysaccharide, donor2.CNhs13533.11875-125C3	0	0	0	0.3682776	0	0.3682776	0	0	0
CD14+ monocytes - treated with lipopolysaccharide, donor3.CNhs13545.11885-125D4	0	0	0	0.3164624	0	0.3164624	0	0.3164624	0.3164624
CD14+ monocytes - treated with Salmonella, donor1.CNhs13471.11866-125B3	0	0	0	0	0	1.7412554	0	0	0.2902092
CD14+ monocytes - treated with Salmonella, donor2.CNhs13485.11876-125C4	0	0	0	0.5673852	0	0	0	0.5673852	0
CD14+ monocytes - treated with Salmonella, donor3.CNhs13493.11886-125D5	0	0	0	0	0	0	0	1.8684667	0
CD14+ monocytes - treated with Trehalose dimycolate (TDM), donor1.CNhs13467.11862-125A8	0	0	0	0	0	1.7587407	0	0	0
CD14+ monocytes - treated with Trehalose dimycolate (TDM), donor2.CNhs13483.11872-125B9	0	0	0	1.0429658	0	0.5214829	0	0.5214829	0
CD14+ monocytes - treated with Trehalose dimycolate (TDM), donor3.CNhs13544.11882-125D1	0	0	0	0	0	0.6515665	0	0	0
CD14+ Monocytes, donor1.CNhs10852.11224-116B9	0	0	0	0	0	0.5539954	0.5539954	54.8455453	40.9956602
CD14+ Monocytes, donor2.CNhs11954.11305-117B9	0	0	0	0.4010889	0	1.4038111	0	0.2005444	0
CD14+ Monocytes, donor3.CNhs11997.11381-118B4	0	0	0	0.2170109	0	1.9530978	0	3.4721739	0.8680435
CD14+CD16- Monocytes, donor1.CNhs13224.11788-124B6	0	0	0	0	0	0.7863003	0	0.1123286	0
CD14+CD16- Monocytes, donor2.CNhs13216.11799-124C8	0	0	0	0	0.1501769	1.501769	0	0	0.3003538
CD14+CD16- Monocytes, donor3.CNhs13540.11910-125G2	0	0	0	0.3214512	0.1607256	0.8036279	0	0	0
CD14+CD16+ Monocytes, donor1.CNhs13541.11789-124B7	0	0	0	0.2112553	0	0.4225106	0	0	0
CD14+CD16+ Monocytes, donor2.CNhs13208.11801-124D1	0	0	0	0	0	1.0630215	0	0	0
CD14+CD16+ Monocytes, donor3.CNhs13549.11912-125G4	0	0	0	0.4193173	0	0.2096586	0	0	0
CD14-CD16+ Monocytes, donor2.CNhs13207.11800-124C9	0	0	0	0	0	0.1989167	0	0	0.1989167
CD14-CD16+ Monocytes, donor3.CNhs13548.11911-125G3	0	0	0	0	0	0.5479925	0.1826642	0	0
CD19+ B Cells, donor1.CNhs12343.11544-120B5	0	0	0	0	0	0.569213	0	7.399769	0
CD19+ B Cells, donor2.CNhs12352.11624-122B4	0	0	0	1.174474	0	0	0	10.5702695	0
CD19+ B Cells, donor3.CNhs12354.11705-123B4	0	0	0	0.3822732	0	1.1468197	0	13.379563	0
CD34 cells differentiated to erythrocyte lineage, biol_ rep1.CNhs13552.11931-125I5	0.2192599	0	0	0.2192599	0	0.2192599	0	0	0
CD34 cells differentiated to erythrocyte lineage, biol_ rep2.CNhs13553.11932-125I6	0	0	0	0.5228709	0	0	0	0	0
CD34+ stem cells - adult bone marrow derived, donor1, tech_rep1.CNhs12588.12225-129F2	0	0	0	1.8436886	0	13.9593566	6.057834	0.7901523	0.2633841
CD4+ T Cells, donor1.CNhs10853.11225-116C1	0	0	0	0	0	3.3440661	0	5.114454	0
CD4+ T Cells, donor2.CNhs11955.11306-117C1	0	0	0.3930108	0	0	2.7510754	0	5.895162	0
CD4+ T Cells, donor3.CNhs11998.11382-118B5	0	0	0	0	0	1.644812	0	10.280075	0
CD4+CD25+CD45RA- memory regulatory T cells expanded, donor1.CNhs13204.11794-124C3	0	0	0.1114105	0	0.1114105	1.1141047	0	0.1114105	0
CD4+CD25+CD45RA- memory regulatory T cells expanded, donor2.CNhs13811.11916-125G8	0	0	0	0	0	0.1280913	0	0.5123653	0
CD4+CD25+CD45RA- memory regulatory T cells expanded, donor3.CNhs13812.11920-125H3	0	0	0	0	0	0.390178	0	0.1300593	0
CD4+CD25+CD45RA- memory regulatory T cells, donor1.CNhs13195.11782-124A9	0	0	0	0	0	0.8838177	0	2.3568473	0
CD4+CD25+CD45RA- memory regulatory T cells, donor2.CNhs13206.11797-124C6	0	0	0	0.2215339	0	0.2215339	0	0.4430678	0

CD4+CD25+CD45RA- memory regulatory T cells, donor3.CNhs13538.11908-125F9	0	0	0	0	0.2708039	0.2708039	0	0	0
CD4+CD25+CD45RA+ naive regulatory T cells expanded, donor1.CNhs13203.11793-124C2	0	0	0	0	0	0.8359325	0	0	0
CD4+CD25+CD45RA+ naive regulatory T cells expanded, donor2.CNhs13918.11915-125G7	0	0	0	0	0	0.2887268	0	0	0
CD4+CD25+CD45RA+ naive regulatory T cells expanded, donor3.CNhs13919.11919-125H2	0	0	0	0	0	1.2983651	0	0	0.1854807
CD4+CD25+CD45RA+ naive regulatory T cells, donor3.CNhs13513.11907-125F8	0	0	0	0	0	7.793069	0	1.948267	0
CD4+CD25-CD45RA- memory conventional T cells expanded, donor1.CNhs13215.11792-124C1	0	0	0	0.1133093	0	1.1330934	0	0.1133093	0
CD4+CD25-CD45RA- memory conventional T cells expanded, donor2.CNhs13920.11914-125G6	0	0	0	0	0	0	0	0	0.1569161
CD4+CD25-CD45RA- memory conventional T cells expanded, donor3.CNhs13921.11918-125H1	0	0	0	0	0	1.1803258	0	0.1475407	0
CD4+CD25-CD45RA- memory conventional T cells, donor3.CNhs13539.11909-125G1	0	0	0	0	0	3.7952954	0	0.7590591	0
CD4+CD25-CD45RA+ naive conventional T cells expanded, donor1.CNhs13202.11791-124B9	0	0	0	0	0	2.0286216	0	0	0
CD4+CD25-CD45RA+ naive conventional T cells expanded, donor2.CNhs13813.11913-125G5	0	0	0	0	0	0.1644379	0	0.3288758	0
CD4+CD25-CD45RA+ naive conventional T cells expanded, donor3.CNhs13814.11917-125G9	0	0	0	0	0	1.1054001	0	0.27635	0
CD4+CD25-CD45RA+ naive conventional T cells, donor1.CNhs13223.11784-124B2	0	0	0	0	0	8.0074745	0	2.372585	0
CD4+CD25-CD45RA+ naive conventional T cells, donor2.CNhs13205.11795-124C4	0	0	0	0	0	6.1534391	0	1.3377041	0
CD4+CD25-CD45RA+ naive conventional T cells, donor3.CNhs13512.11906-125F7	0	0	0	0	0	11.498907	0	3.136066	0
CD8+ T Cells, donor1.CNhs10854.11226-116C2	0	0	0	0.4032134	0	3.6289214	0	2.4192808	0
CD8+ T Cells, donor2.CNhs11956.11307-117C2	0	0	0	0	0	2.9418422	0	2.674402	0
CD8+ T Cells, donor3.CNhs11999.11383-118B6	0	0	0	1.5930684	0	5.7929761	0	5.0688541	0
Chondrocyte - de diff, donor1.CNhs11923.11261-116G1	0	0	28.5536932	13.3732486	0	5.0601482	0	6206.633125	1230.700314
Chondrocyte - de diff, donor2.CNhs11372.11338-117F6	0	0	38.1016811	13.034786	0	6.016056	0	9316.362393	3263.20846
Chondrocyte - de diff, donor3.CNhs12020.11410-118E6	0	0.4345396	33.8940855	12.8913402	0.1448465	8.9804843	0.1448465	5012.124095	1498.147546
Chondrocyte - re diff, donor2.CNhs11373.11339-117F7	0	0	0	19.8821487	0.7952859	1.5905718	0	8566.820221	6791.741989
Chondrocyte - re diff, donor3.CNhs12021.11411-118E7	0	0	7.299523	18.4921251	0.4866349	3.4064441	0.4866349	9526.364221	8747.261793
chorionic membrane cells, donor1.CNhs12504.12238-129G6	0	2.8710105	7.6560279	3.1900116	0.3190012	0.9570035	5.742021	236.3798602	552.8290098
chorionic membrane cells, donor2.CNhs12506.12239-129G7	0	0.27479278	2.10674464	10.7169184	1.09917111	3.29751335	0	4308.567252	1307.189256
chorionic membrane cells, donor3.CNhs12380.12240-129G8	0	0	10.1276607	1.0660696	1.0660696	1.5991043	14.9249738	81.5543212	73.0257644
Ciliary Epithelial Cells, donor1.CNhs10871.11242-116D9	0	3.97046232	12.38406107	19.0014983	0.18906963	16.543593	1.13441781	852.9876553	2.36337
Ciliary Epithelial Cells, donor2.CNhs11966.11323-117D9	0	2.4390234	9.7560935	22.1729398	0.2217294	13.7472226	1.108647	2929.26707	7.31707
Ciliary Epithelial Cells, donor3.CNhs12009.11399-118D4	0	1.49319136	11.41852215	25.1207487	0.43917393	12.6482091	0.96618264	2674.481075	24.41807043
Corneal Epithelial Cells, donor1.CNhs11336.11526-119I5	0	0	9.4716776	10.5645634	0.3642953	16.7575833	0	17.4861739	0
Corneal Epithelial Cells, donor2.CNhs12094.11606-120I4	0	0	0	5.410587	0	2.705294	0	16.231762	0
Corneal Epithelial Cells, donor3.CNhs12123.11687-122I4	0	0	3.33706	6.3033356	0	7.0449043	0	15.943731	0
Dendritic Cells - monocyte immature derived, donor1, tech_rep1.CNhs10855.11227-116C3	0	0	0	0.6490948	0	3.5700214	0.6490948	0	0
Dendritic Cells - monocyte immature derived, donor1, tech_rep2.CNhs11062.11227-116C3	0	0	0	0.5223892	0	1.9154271	0.6965189	0	0.1741297
Dendritic Cells - monocyte immature derived, donor3.CNhs12000.11384-118B7	0	0	0	0.5318319	0	3.323949	0.3988739	4.254655	1.595496
Dendritic Cells - plasmacytoid, donor1.CNhs10857.11228-116C4	0	0	0	0	0	2.3849062	0	0.2384906	0
Endothelial Cells - Aortic, donor0.CNhs10837.11207-116A1	0	0.3975248	0.1987624	2.3851488	0	9.1430707	374.269613	0.3975248	0.3975248
Endothelial Cells - Aortic, donor1.CNhs12495.11263-116G3	0	0.8602346	2.5807038	6.8818768	0	6.8818768	331.190319	148.820585	18.92516
Endothelial Cells - Aortic, donor2.CNhs11375.11340-117F8	0	0.3471405	0.694281	1.7357025	0	7.2899505	591.180274	0	0
Endothelial Cells - Aortic, donor3.CNhs12022.11412-118E8	0	2.82654	5.65308	4.5224635	0	10.1755429	382.713477	0	0
Endothelial Cells - Artery, donor1.CNhs12496.11264-116G4	0	4.6144938	2.936496	5.0339932	0.4194994	15.1019797	407.753452	0.4194994	0
Endothelial Cells - Artery, donor2.CNhs11977.11341-117F9	0	4.1267706	0.275118	5.2272428	0	11.5549577	428.909027	0	0
Endothelial Cells - Artery, donor3.CNhs12023.11413-118E9	0	1.2539698	2.2989446	1.6719598	0	10.0317585	437.21747	2.92593	0.8359799
Endothelial Cells - Lymphatic, donor1.CNhs10865.11236-116D3	0	0.2584168	0	0.2584168	0	5.1683353	312.167445	0	0
Endothelial Cells - Lymphatic, donor2.CNhs11901.11317-117D3	0	1.778831	0	3.5576626	0	11.3845205	330.862624	21.3459758	0.7115325
Endothelial Cells - Lymphatic, donor3.CNhs11906.11393-118C7	0	0.6694412	0.6694412	1.3388824	0	9.7068977	421.413252	35.1456642	0.3347206
Endothelial Cells - Microvascular, donor1.CNhs11925.11265-116G5	0	0	0	0	0	7.2509277	588.130803	0	0
Endothelial Cells - Microvascular, donor2.CNhs11376.11342-117G1	0	0	0	0	0	3.0410884	465.286529	0.7602721	0
Endothelial Cells - Microvascular, donor3.CNhs12024.11414-118F1	0	0	0.7321862	0.7321862	0	10.7387305	693.86843	42.2227365	9.030296
Endothelial Cells - Thoracic, donor1.CNhs11926.11266-116G6	0	0.3676631	0	1.4706523	0	9.9269032	304.057367	0	0.3676631
Endothelial Cells - Thoracic, donor2.CNhs11978.11343-117G2	0	0.8101419	2.430426	2.4304258	0	17.8231228	446.388213	37.2665292	2.430426
Endothelial Cells - Umbilical vein, donor1.CNhs10872.11243-116E1	0	0.71439783	0.17859946	13.3949592	0	11.4303652	218.427135	0.71439783	1.875294
Endothelial Cells - Umbilical vein, donor2.CNhs11967.11324-117E1	0	0	0.2245294	8.9811751	0.4490588	17.0642323	247.431369	2.918882	0.8981175
Endothelial Cells - Umbilical vein, donor3.CNhs12010.11400-118D5	0	0.225223	0.1126115	10.5854793	0	9.2341414	203.263722	1.2387263	1.238726
Endothelial Cells - Vein, donor1.CNhs12497.11267-116G7	0	0	1.533166	3.066333	0	18.397996	614.799716	0	0
Endothelial Cells - Vein, donor2.CNhs11377.11344-117G3	0	0.9492657	0	8.5433909	0	7.5941254	517.349784	0	0
Endothelial Cells - Vein, donor3.CNhs12026.11416-118F3	0.1832017	0.1832017	1.2824122	5.679254	0	7.1448679	398.09739	70.3494693	16.1217534
Esophageal Epithelial Cells, donor1.CNhs11323.11507-119G4	0	0	5.2331286	4.7970346	0	22.2407967	0	53.6395687	0.4360941
Esophageal Epithelial Cells, donor2.CNhs12083.11587-120G3	0	0	18.619725	0	0	18.619725	0	93.098625	0
Esophageal Epithelial Cells, donor3.CNhs12622.11668-122G3	0	0	0	0	0	24.69834	0	98.79335	0
Fibroblast - Aortic Adventitial, donor1.CNhs10874.11245-116E3	0	4.432068	79.777222	10.7635935	0	8.6108748	2.4059798	3966.194256	943.5239423
Fibroblast - Aortic Adventitial, donor2.CNhs11968.11326-117E3	0	3.6052077	116.5203136	16.4397472	0.1442083	6.7777904	2.8841661	10180.38557	2346.269186
Fibroblast - Aortic Adventitial, donor3.CNhs12011.11401-118D6	0	5.3200257	82.9924014	12.7680617	0	4.2560207	4.6106889	5570.421611	1356.251894
Fibroblast - Cardiac, donor1.CNhs12498.11268-116G8	0	1.1213552	105.9680664	17.3810056	0.5606776	5.0460984	1.6820328	5614.06481	1314.228296
Fibroblast - Cardiac, donor2.CNhs11378.11345-117G4	0	1.06749	9.60741	37.36215	0	8.53992	25.61976	5875.46475	1267.11058
Fibroblast - Cardiac, donor3.CNhs12027.11417-118F4	0	0.2466675	36.2601295	47.8535044	0	8.3866965	0.4933351	11150.85319	638.6222828
Fibroblast - Cardiac, donor4.CNhs11909.11452-119A3	0	0.311211	114.836872	42.9471228	0.622422	8.402698	1.8672662	2805.878695	2896.129896
Fibroblast - Cardiac, donor5.CNhs12057.11456-119A7	0	3.5024775	6.3314016	23.5743676	0	14.9528846	27.0768451	2723.84979	1367.986875
Fibroblast - Cardiac, donor6.CNhs12061.11460-119B2	0	1.7980809	5.2307809	23.0481283	0	9.3173284	26.1539045	1594.897788	1513.493761
Fibroblast - Choroid Plexus, donor1.CNhs11319.11492-119E7	0	0.7567871	5.6002249	26.4875499	5.1461524	11.9572368	0.6054297	7273.7839	4594.606073
Fibroblast - Choroid Plexus, donor2.CNhs12344.11572-120E6	0	0	3.4570555	39.7561387	4.6094073	6.3379351	1.1523518	16160.58658	2201.568207
Fibroblast - Choroid Plexus, donor3.CNhs12620.11653-122E6	0	1.468019	5.872076	26.424342	2.936038	23.488304	5.872076	5029.432971	273.051527
Fibroblast - Conjunctival, donor1.CNhs11339.11531-120A1	0	3.7491429	53.6596079	15.9338573	0.7029643	44.989715	5.1550715	1002.895728	534.4871861
Fibroblast - Conjunctival, donor3.CNhs12734.11692-122I9	0	2.9817168	157.6802022	35.9559972	2.4555315	8.5943602	0.5261853	3648.744436	4925.094639
Fibroblast - Dermal, donor1.CNhs12499.11269-116G9	0	1.2486403	14.0472035	15.6080038	0	7.4918419	1.8729605	402.6864995	71.4846576
Fibroblast - Dermal, donor2.CNhs11379.11346-117G5	0	1.7114155	4.5637745	9.6980211	0	6.8456618	56.4767103	300.0681778	41.644443
Fibroblast - Dermal, donor3.CNhs12028.11418-118F5	0	5.0812552	14.0481761	15.8415601	0.1494487	6.8746394	1.6439355	592.5640183	136.8949913
Fibroblast - Dermal, donor4.CNhs12052.11450-119A1	0	1.9963865	16.9105679	16.4408299	1.5266485	6.8112009	2.9358625	595.745212	276.7931133
Fibroblast - Dermal, donor5.CNhs12055.11454-119A5	0	2.1043482	19.2628803	16.6729133	6.7986637	5.5036801	0.9712377	677.1145259	272.4321654
Fibroblast - Dermal, donor6.CNhs12059.11458-119A9	0	2.3876637	16.2922935	18.2586048	5.056229	4.9157782	1.1236064	685.1190347	191.5749003
Fibroblast - Gingival, donor1.CNhs10866.11237-116D4	0	0.4083083	11.8409421	33.4812842	10.820171	6.9412419	1.4290792	1099.778521	356.0448747
Fibroblast - Gingival, donor10 (periodontitis).CNhs14135.11928-125I2	0	4.7186323	51.3806636	31.9818417	126.616636	11.2722885	3.9321937	12002.10598	725.3586551
Fibroblast - Gingival, donor2.CNhs11961.11318-117D4	0	0.6141716	7.3700591	13.8802779	2.702355	17.3196388	7.738562	705.3146502	63.5053421
Fibroblast - Gingival, donor3.CNhs12006.11394-118C8	0	0.2066516	23.3516265	38.9538195	6.1995469	12.1924421	0.7232805	1611.985512	602.3893042
Fibroblast - Gingival, donor4 (GFH2).CNhs10848.11222-116B7	0	4.752011	60.588146	57.024137	0	8.316021	0	13755.88509	1701.220092
Fibroblast - Gingival, donor5 (GFH3).CNhs11952.11303-117B7	0	6.6762071	40.5517764	49.4533858	0.7418008	7.9125418	0.4945338	15957.12229	914.1458375
Fibroblast - Gingival, donor6 (aggressive periodontitis).CNhs14128.11921-125H4	0	9.4624063	25.4650052	11.2713958	2.3656015	10.4364776	0.6957651	3864.697213	258.8246431
Fibroblast - Gingival, donor6 (control).CNhs14129.11922-125H5	0	7.7224359	12.4963053	16.2873192	0	10.3901863	1.2636713	3028.318115	125.5246844
Fibroblast - Gingival, donor7 (aggressive periodontitis).CNhs14130.11923-125H6	0	12.2952845	81.2557933	89.274457	0	14.4335948	2.672888	16084.37117	202.6049
Fibroblast - Gingival, donor7 (control).CNhs14131.11924-125H7	0	6.7170111	33.877099	21.027165	0	5.4028132	0.8761319	8845.42735	723.9769678
Fibroblast - Gingival, donor8 (chronic periodontitis).CNhs14132.11925-125H8	0	5.1142424	19.9186287	27.9937483	17.0923365	7.1330224	0.6729266	7040.966035	704.4196083
Fibroblast - Gingival, donor8 (control).CNhs14133.11926-125H9	0	6.96821628	21.10374072	17.3209948	0.39818379	7.16730817	0.09954595	6875.041702	158.9748771
Fibroblast - Gingival, donor9 (control).CNhs14134.11927-125I1	0	6.4915453	134.4677233	48.5320289	0	7.5734694	0.4636818	18798.27959	2331.392114
Fibroblast - Lung, donor1.CNhs12500.11270-116H1	0	2.369098	0	7.107295	2.369098	33.167377	0	2487.553275	421.699507
Fibroblast - Lung, donor2.CNhs11380.11347-117G6	0	0	0	12.785171	1.598146	12.785171	0	644.052989	310.040398
Fibroblast - Lung, donor3.CNhs12029.11419-118F6	0.2383675	0.4767349	0.7151024	10.4881688	1.4302049	23.5983797	1.4302049	760.1538694	212.8621529

Fibroblast - Lymphatic, donor1.CNhs11322.11506-119G3	0	0	0	10.9219362	0	5.4609682	14.5625818	4353.301794	2242.637596
Fibroblast - Lymphatic, donor2.CNhs12082.11586-120G2	0	4.752388	9.504776	9.504776	0	9.504776	4.752388	12798.17968	5127.82617
Fibroblast - Lymphatic, donor3.CNhs12118.11667-122G2	0	0.7186181	0	11.4978902	0	13.6537447	6.4675633	10509.79032	1616.890819
Fibroblast - Mammary, donor1.CNhs11348.11540-120B1	0	1.0501185	4.550514	12.2513831	0	6.3007112	3.8504347	4368.843198	761.3359471
Fibroblast - Mammary, donor2.CNhs12103.11620-122A9	0	2.942482	0	5.884965	0	17.654894	5.884964	7323.838492	632.633698
Fibroblast - Mammary, donor3.CNhs12128.11701-123A9	0	0	0	42.966561	0	8.593312	0	13740.70648	1632.729
Fibroblast - Periodontal Ligament, donor1.CNhs10867.11238-116D5	0	0.6733445	10.9418473	22.0520309	11.2785196	15.4869224	4.5450751	631.9337716	206.2117396
Fibroblast - Periodontal Ligament, donor2.CNhs11962.11319-117D5	0	2.2521333	17.8919483	28.2767855	13.2625631	16.140289	3.6284371	1239.674295	150.2673423
Fibroblast - Periodontal Ligament, donor3.CNhs11907.11395-118C9	0	0.5541282	21.3339369	26.321091	25.7669627	7.7577952	0.5541282	733.9428412	122.7394031
Fibroblast - Periodontal Ligament, donor4 (PL29).CNhs12493.11223-116B8	0	2.6338657	40.3859412	19.7539929	0.4389776	7.023642	0	11025.80476	216.8549447
Fibroblast - Periodontal Ligament, donor5 (PL30).CNhs11953.11304-117B8	0	3.064878	27.5839017	13.7919508	0	1.8389268	0.3064878	9342.054504	426.0180362
Fibroblast - Periodontal Ligament, donor6 (PLH3).CNhs11996.11380-118B3	0	6.4602366	53.634987	40.2637998	0.9014284	7.662141	0.1502381	15130.02609	1234.355892
Fibroblast - Pulmonary Artery, donor1.CNhs10878.11250-116E8	0	1.8149149	6.9193632	13.611862	0.1134322	10.3223286	3.5163977	1594.402766	819.4340913
Fibroblast - skin dystrophia myotonica, donor1.CNhs11353.11556-120C8	0	3.2033608	292.7871801	22.8506406	5.3389347	5.5524922	0.2135574	10152.73182	1840.22402
Fibroblast - skin dystrophia myotonica, donor2.CNhs11354.11557-120C9	0	8.0534122	184.8046178	16.954552	0	6.5698889	1.0596595	7487.130204	2602.099882
Fibroblast - skin dystrophia myotonica, donor3.CNhs11913.11560-120D3	0	4.3282062	74.1978211	16.1792471	0	10.9235681	0.1030525	5714.984114	1489.727363
Fibroblast - skin normal, donor1.CNhs11351.11553-120C5	0	3.908454	103.1087385	22.8923734	4.8390383	3.908454	0.1861169	6874.598322	1370.750647
Fibroblast - skin normal, donor2.CNhs11914.11561-120D4	0	4.09235422	86.7189345	9.84113752	0	1.7538661	0	6800.713212	784.1730176
Fibroblast - skin spinal muscular atrophy, donor1.CNhs11074.11555-120C7	0	4.7865947	251.0200737	18.4099798	0.3681996	4.5104451	0	7752.534514	2503.665193
Fibroblast - skin spinal muscular atrophy, donor2.CNhs11911.11558-120D1	0	7.9206568	374.2106216	23.4386782	6.9507804	5.4959659	0	6472.14647	2937.593791
Fibroblast - skin spinal muscular atrophy, donor3.CNhs11912.11559-120D2	0	1.7127857	24.3820078	11.9894997	0.2015042	2.5188025	0.2015042	3719.162955	342.4563819
Fibroblast - skin walker warburg, donor1.CNhs11352.11554-120C6	0	7.1215449	34.0816792	13.3952868	0.5086818	5.9346207	0.1695606	2466.428375	363.8770311
Fibroblast - Villous Mesenchymal, donor1.CNhs11343.11535-120A5	0	2.2803238	0.6219065	15.3403604	0.2073022	6.4263672	2.487626	2545.25601	952.7607611
Fibroblast - Villous Mesenchymal, donor2.CNhs12099.11615-122A4	0	0	18.37213	6.124043	0	16.330781	8.165391	3798.948132	908.399741
Fibroblast - Villous Mesenchymal, donor3.CNhs12920.11696-123A4	0	1.0436657	26.613474	10.958489	1.043666	28.700805	2.087331	2301.282769	1109.416591
gamma delta positive T cells, donor1.CNhs13914.11937-126A2	0	0	0	0	0	7.2006808	0	0	0
gamma delta positive T cells, donor2.CNhs13915.11938-126A3	0	0	0	0.2521624	0	4.28676	0.5043247	0	0
Gingival epithelial cells, donor1 (GEA11).CNhs11061.11221-116B6	0	0.3865217	6.5708691	17.7799985	0.3865217	10.6293469	5.9910865	30.7284759	0
Gingival epithelial cells, donor2 (GEA14).CNhs11896.11302-117B6	0	0	2.7274612	20.4559591	0.2727461	17.1830056	2.4547151	165.2841488	0.5454922
Gingival epithelial cells, donor3 (GEA15).CNhs11903.11379-118B2	0	0.5736092	4.302069	22.3707584	0.5736092	20.3631263	0.2868046	10.6117701	0
Hair Follicle Dermal Papilla Cells, donor1.CNhs12501.11271-116H2	0	7.822476	37.547887	21.902934	18.773944	10.951467	4.693486	4491.666071	1541.027893
Hair Follicle Dermal Papilla Cells, donor2.CNhs11979.11348-117G7	0.6432409	3.2162047	100.9888272	32.1620469	49.5295523	18.0107462	3.8594456	4409.416632	811.126823
Hair Follicle Dermal Papilla Cells, donor3.CNhs12030.11420-118F7	0	1.381349	22.101587	19.33889	13.813492	4.144047	26.245635	1436.603176	96.69444
Hair Follicle Outer Root Sheath Cells, donor1.CNhs12339.11504-119G1	0	0	62.225304	18.1103493	1.3931037	6.965519	0	1596.032569	653.8300425
Hair Follicle Outer Root Sheath Cells, donor2.CNhs12347.11584-120F9	0	0.7218795	54.8628406	9.3844333	5.0531565	3.6093975	0	2201.73242	673.5135564
Hepatic Sinusoidal Endothelial Cells, donor1.CNhs12075.11521-119H9	0	0	0	8.8578655	0	2.9526219	497.516776	104.8180748	8.857865
Hepatic Sinusoidal Endothelial Cells, donor2.CNhs12092.11601-120H8	0	0	0	11.219342	0	12.621759	197.740901	6843.798562	179.5095
Hepatic Sinusoidal Endothelial Cells, donor3.CNhs12625.11682-122H8	0	9.832923	0	6.555282	0	9.832923	419.538051	81.941025	16.38821
Hepatic Stellate Cells (lipocyte), donor1.CNhs11335.11524-119I3	0	0	81.491653	6.996758	0	15.639812	2.05787	12689.64991	4897.730734
Hepatic Stellate Cells (lipocyte), donor2.CNhs12093.11604-120I2	0	1.470087	55.863309	8.820522	0	11.760696	4.410261	28156.57849	5917.100632
Hepatic Stellate Cells (lipocyte), donor3.CNhs12627.11685-122I2	0	0.6242381	8.7393337	11.2362861	0	12.0686035	8.9474131	3624.326514	1330.043351
Hepatocyte, donor1.CNhs12340.11523-119I2	0	0	0	0	1.26755	1.26755	1.26755	10.140402	3.802651
Hepatocyte, donor2.CNhs12349.11603-120I1	0	0	0.9828272	0	0	0.9828272	0.9828272	4.914136	7.862618
Hepatocyte, donor3.CNhs12626.11684-122I1	0	0	6.498689	11.2250081	1.7723697	1.1815798	30.7210751	153.6053755	255.2212396
immature langerhans cells, donor1.CNhs13537.11904-125F5	0	0	0.6749217	2.2497389	0	0.2249739	0	2.4747128	0
immature langerhans cells, donor2.CNhs13480.11905-125F6	0	0	0.773802	17.023643	0.773802	0	0	7.73802	2.321406
Intestinal epithelial cells (polarized), donor1.CNhs10875.11246-116E4	0.6149422	0	0	10.4540173	0	1.8448266	0	4.4275836	0.6149422
Iris Pigment Epithelial Cells, donor1.CNhs12596.11530-119I9	0	3.602924	10.6372043	14.0685603	3.7744918	10.2940687	0.8578391	1485.090966	119.9258994
Keratinocyte - epidermal, donor1.CNhs11064.11272-116H3	0	0	31.2788315	23.0475599	0.2195006	23.3768108	4.1705109	36.4370951	0
Keratinocyte - epidermal, donor2.CNhs11381.11349-117G8	0	0	16.860265	7.868123	0	21.356334	2.248035	11.240176	0
Keratinocyte - epidermal, donor3.CNhs12031.11421-118F8	0	0.2010579	1.4074057	9.3491945	0	10.555542	0.5026449	2.8148112	0.4021159
Keratinocyte - oral, donor1.CNhs10879.11251-116E9	0	0	4.72201072	21.3879308	0.83329601	21.8508731	0	17.86956997	1.296238
Keratocytes, donor1.CNhs11337.11527-119I6	0	0.3258083	60.926153	8.7968243	0.9774249	32.2550221	0.3258083	821.3627372	161.9267277
Keratocytes, donor2.CNhs12095.11607-120I5	0	1.039935	28.07824	9.359414	4.159739	8.319479	3.119804	2335.693533	374.376523
Keratocytes, donor3.CNhs12921.11688-122I5	0	3.0161945	57.5590459	22.3701095	0.7540486	17.091769	0	1023.495347	208.6201223
Lens Epithelial Cells, donor1.CNhs12342.11529-119I8	0	2.886627	8.65988	17.319761	0	17.319761	14.433134	775.059303	0
Lens Epithelial Cells, donor2.CNhs12568.11609-120I7	0.8115128	1.2752344	21.215264	18.317004	1.7389561	13.7957182	0	266.4080699	3.4779121
Lens Epithelial Cells, donor3.CNhs12572.11690-122I7	0	2.1133565	5.6356174	75.9634252	1.8785391	12.3279128	0.3522261	15005.88783	543.6022543
Macrophage - monocyte derived, donor1.CNhs10861.11232-116C8	0	0	0	0.246217	0	0.246217	0	0.738651	0.738651
Macrophage - monocyte derived, donor2.CNhs11899.11313-117C8	0	0	0	0.2340043	0	0.9360171	0	1.4040256	0
Macrophage - monocyte derived, donor3.CNhs12003.11389-118C3	0	0	0	0.2972624	0	0.7431559	0	2.229467	0.2972623
Mallassez-derived cells, donor2.CNhs13550.11929-125I3	0	0	7.5591957	18.6460162	1.1758748	5.8793745	0	474.2135483	12.7666417
Mallassez-derived cells, donor3.CNhs13551.11930-125I4	0.1417751	0.1417751	0.9924257	10.0660318	0.1417751	8.5065059	0.5671004	62.8063682	1.843076
Mammary Epithelial Cell, donor1.CNhs11077.11273-116H4	0	0	7.0751233	13.1651028	0	27.8527006	0	1.79117046	0
Mammary Epithelial Cell, donor2.CNhs11382.11350-117G9	0	0.2906339	6.6845806	12.2066254	0.2906339	28.77276	0	1.1625357	0
Mammary Epithelial Cell, donor3.CNhs12032.11422-118F9	0.3833827	0	26.453405	9.9679497	0	24.9198742	7.6676535	69.0088824	17.6356
Mast cell - stimulated, donor1.CNhs11073.11487-119E2	0	0	0	1.4779897	0	0.9853264	0	0.9853265	0.9853264
Mast cell, donor1.CNhs12566.11563-120D6	0	0	0	1.8490171	0	1.4968235	0	0	0.17609686
Mast cell, donor2.CNhs12594.11565-120D8	0	0	7.4638121	3.3172498	1.2439687	1.6586249	0.6219843	54.5272941	33.37983
Mast cell, donor3.CNhs12593.11566-120D9	0	0	5.1883183	9.223677	0.14412	3.8912387	0.2882399	31.8505103	17.29439
Mast cell, donor4.CNhs12592.11567-120E1	0	0	7.4483036	2.2723638	0.6312122	1.5149093	0.2524849	41.1550331	29.9194567
Mast cell, expanded and stimulated, donor5.CNhs13925.11940-126A5	0	0	0	1.76080081	0	0.92232425	0	0	0.251543
Mast cell, expanded and stimulated, donor8.CNhs13927.11942-126A7	0	0	0	0.4993097	0	0.4993097	0	1.4979291	1.4979291
Mast cell, expanded, donor5.CNhs13924.11939-126A4	0	0	0	2.78628231	0	1.39314116	0	0	0
Mast cell, expanded, donor8.CNhs13926.11941-126A6	0	0	0	0.7791444	0	1.1687166	0	1.8180036	1.4284314
Melanocyte - dark, donor1.CNhs12591.11502-119F8	0	0	0	0.209535	0	13.5150039	214.878084	7.8575604	0.8381398
Melanocyte - dark, donor2.CNhs12346.11582-120F7	0	1.7510185	17.5101852	40.7111808	0	7.8795834	7.4418288	3519.109494	1975.586659
Melanocyte - dark, donor3.CNhs12570.11663-122F7	0	0	0.06349789	14.7950094	9.77867572	2.73040943	0	22.09726717	35.74931448
Melanocyte - light, donor1.CNhs11303.11274-116H5	0	0	0	22.5373171	15.2795372	10.6956759	0	0	0
Melanocyte - light, donor2.CNhs11383.11351-117H1	0	0	0	10.54957	7.033046	4.688698	0	0	0
Melanocyte - light, donor3.CNhs12033.11423-118G1	1.710724	0	32.503764	8.553621	0	10.264346	15.39652	1103.417269	443.0776
Meningeal Cells, donor1.CNhs11320.11493-119E8	0	1.0091798	1.345573	16.5954005	0.7849176	22.3140858	53.7107894	1859.806165	394.2528927
Meningeal Cells, donor2.CNhs12080.11573-120E7	0	0.8719201	0	21.7980035	0.4359601	16.1305225	0.4359601	4866.622248	1167.065104
Meningeal Cells, donor3.CNhs12731.11654-122E7	0	0.44002972	0.51336801	23.10156	0.95339772	18.7746012	28.6019315	1271.025832	201.8269626
mesenchymal precursor cell - adipose, donor1.CNhs12363.11747-123G1	0	3.1343509	52.985455	27.9106481	0.1492548	7.4627401	7.7612498	9107.528072	2933.90166
mesenchymal precursor cell - adipose, donor2.CNhs12364.11748-123G2	0	3.5056996	93.9527505	23.1376177	0	15.8925051	1.4022799	13073.68458	2807.831705
mesenchymal precursor cell - adipose, donor3.CNhs12365.11749-123G3	0	9.4316997	65.4670917	16.08937	0.5548059	7.2124761	4.9932528	6050.15792	4483.940973
mesenchymal precursor cell - bone marrow, donor1.CNhs12366.11750-123G4	0	1.704627	46.593139	14.205225	0	4.166866	0.378806	2460.345033	852.313524
mesenchymal precursor cell - bone marrow, donor2.CNhs12367.11751-123G5	0	1.7609753	182.6382966	18.8675926	0.2515679	11.3205555	0.2515679	3891.000736	2060.844251
mesenchymal precursor cell - bone marrow, donor3.CNhs13098.11840-124H4	0	0.8898112	11.5675457	24.024903	0	3.5592448	0	3236.243413	4565.621378
mesenchymal precursor cell - cardiac, donor1.CNhs12368.11752-123G6	0	1.6018805	32.4952898	15.3322846	0	13.0438839	5.2633215	2163.682847	594.2976576
mesenchymal precursor cell - cardiac, donor2.CNhs12369.11753-123G7	0	3.3270803	119.9261226	9.83001	0	11.0398574	5.746775	7204.338746	3838.392076
mesenchymal precursor cell - cardiac, donor3.CNhs12370.11754-123G8	0	2.1761208	28.9113193	46.0094114	0	6.8392368	1.8652464	8373.557432	2788.232504
mesenchymal precursor cell - cardiac, donor4.CNhs12371.11755-123G9	0	3.1049581	40.9558764	27.3532026	0.1478551	5.3227852	7.2449023	1664.405422	762.4890083
mesenchymal precursor cell - ovarian cancer left ovary, donor1.CNhs12372.11756-123H1	0	4.4603095	6.849761	32.177947	0	8.1241352	3.1859353	3071.082374	1106.793938
mesenchymal precursor cell - ovarian cancer left ovary, donor2.CNhs13092.11833-124G6	0	0.8996062	6.7470466	28.7873992	0	15.7431089	5.3976373	1739.388634	569.0009368

mesenchymal precursor cell - ovarian cancer left ovary, donor3.CNhs12376.11760-123H5	0	3.571048	19.5631326	44.7157317	0	8.5394627	0.4657889	5216.835351	1314.921982
mesenchymal precursor cell - ovarian cancer left ovary, donor4.CNhs13094.11836-124G9	0	9.952949	14.5147172	24.8823724	0	4.5617682	5.3911807	3938.879562	1467.64527
mesenchymal precursor cell - ovarian cancer metastasis, donor1.CNhs12374.11758-123H3	0	5.3168342	14.6212942	24.191596	0	9.0386183	2.3925755	7407.413535	2290.492213
mesenchymal precursor cell - ovarian cancer metastasis, donor2.CNhs13093.11835-124G8	0	1.0434901	18.2610771	29.7394686	1.0434902	9.9131562	4.6957056	6026.155464	1671.671178
mesenchymal precursor cell - ovarian cancer metastasis, donor3.CNhs12378.11762-123H7	0	0.751288	192.3297395	36.9633718	0.4507728	10.6682902	1.2020608	15753.00336	8990.814292
mesenchymal precursor cell - ovarian cancer metastasis, donor4.CNhs13097.11838-124H2	0	4.5696625	169.4583192	21.705897	0.7616104	6.4736886	0	4499.975192	5825.558137
mesenchymal precursor cell - ovarian cancer right ovary, donor1.CNhs12373.11757-123H2	0	4.0687073	13.426734	16.6817001	0	4.475578	0.4068707	1850.448095	1108.722748
mesenchymal precursor cell - ovarian cancer right ovary, donor2.CNhs12375.11759-123H4	0	3.4551246	2.182184	46.9169541	0	8.1831897	5.0917625	4353.456901	1784.84459
mesenchymal precursor cell - ovarian cancer right ovary, donor3 (SOC-57-02).CNhs12377.11761-123H6	0	1.3963372	60.2573225	29.4304927	0.4296422	22.9858592	3.2223167	4877.405985	1886.773845
mesenchymal precursor cell - ovarian cancer right ovary, donor3 (SOC-57-02-G).CNhs13507.11842-124	0	0.4640338	1.856135	18.5613503	0	12.5289115	0	2281.653998	894.1930553
mesenchymal precursor cell - ovarian cancer right ovary, donor4.CNhs13096.11837-124H1	0	1.9904794	10.3504932	31.4495752	0.7961918	14.331452	2.3885754	7057.842011	2000.829937
Mesenchymal stem cells - adipose, donor0.CNhs10844.11217-116B2	0	1.6286809	0	12.0522388	0	4.2345703	13.3551836	2589.602665	1102.616984
Mesenchymal Stem Cells - adipose, donor1.CNhs11345.11537-120A7	0	0	14.30626	46.495338	0	7.153128	64.378159	11448.58283	3136.647029
Mesenchymal Stem Cells - adipose, donor2.CNhs12101.11617-122A6	0	0	6.621074	6.621074	0	13.242148	6.621074	3582.001197	900.466106
Mesenchymal Stem Cells - adipose, donor3.CNhs12922.11698-123A6	0	3.381211	1.690606	11.8342385	0	0	16.0607523	4617.043635	826.706092
Mesenchymal Stem Cells - amniotic membrane, donor1.CNhs11349.11547-120B8	0	1.5956287	4.786886	25.7959972	0.2659381	5.8506385	0	5241.108401	1013.7561
Mesenchymal Stem Cells - amniotic membrane, donor2.CNhs12104.11627-122B7	0	2.080148	1.040074	22.881636	0	4.160297	0	5725.609398	790.456521
Mesenchymal Stem Cells - bone marrow, donor1.CNhs11344.11536-120A6	0	1.5432442	7.9734286	9.0022581	0.2572074	9.7738802	1.2860369	2046.856284	131.1757609
Mesenchymal Stem Cells - bone marrow, donor2.CNhs12100.11616-122A5	0	1.418491	2.836982	11.347931	0	7.092457	1.418491	3316.432708	89.364953
Mesenchymal Stem Cells - bone marrow, donor3.CNhs12126.11697-123A5	0	0.7992665	4.7955992	9.8576207	0.2664222	9.5911985	1.0656887	2578.700271	110.03236
Mesenchymal Stem Cells - bone marrow, donor4.CNhs11316.11464-119B6	0	1.8699233	38.5884197	28.3888374	0.339986	9.6896032	0.5099791	2419.510914	900.9631029
Mesenchymal stem cells - hepatic, donor0.CNhs10845.11218-116B3	0	0.7107838	8.1740147	25.5882203	4.2647033	3.1985275	0.7107839	6514.33442	6055.523415
Mesenchymal Stem Cells - hepatic, donor1.CNhs11346.11538-120A8	0	0	60.351699	10.849744	2.712436	11.527853	0	16512.63139	8097.299144
Mesenchymal Stem Cells - hepatic, donor2.CNhs12730.11618-122A7	0	0.428934	12.15313	28.166665	5.147208	4.718274	0.142978	6304.900592	5531.246663
Mesenchymal stem cells - umbilical, donor0.CNhs12492.11214-116A8	0	0.7919519	2.3758556	7.1275668	0	5.5436631	0.7919519	3498.843374	1545.890056
Mesenchymal Stem Cells - umbilical, donor1.CNhs11347.11539-120A9	0	1.6278648	170.383184	25.5032154	1.0852432	11.9376753	0	30925.09398	19803.51811
Mesenchymal Stem Cells - umbilical, donor2.CNhs12102.11619-122A8	0	4.174623	162.810309	25.04774	0	8.349247	0	35651.28312	15208.15273
Mesenchymal Stem Cells - umbilical, donor3.CNhs12127.11700-123A8	0	0	9.878884	13.9950858	0	13.1718454	0.8232403	7818.313478	2448.316762
Mesenchymal Stem Cells - Vertebral, donor1.CNhs10846.11219-116B4	0	1.8695147	1.068294	21.6329569	0	8.0122062	0.8012206	535.2153743	129.2635935
Mesenchymal Stem Cells - Wharton's Jelly, donor1.CNhs11057.11548-120B9	0	1.809804	48.9939803	33.2228309	0.1292717	3.8781514	0	6772.803732	3271.608582
Mesothelial Cells, donor1.CNhs10850.11247-116E5	0	0.9043181	315.60703	19.5935595	0.3014394	5.1244694	0	624.5823894	2179.105257
Mesothelial Cells, donor3.CNhs12012.11402-118D7	0	0.299919	209.3434435	24.4933828	0	16.5955165	0.19994598	639.6271976	977.9358
migratory langerhans cells, donor1.CNhs13535.11901-125F2	0	0	0.1948603	3.8972061	0.3897206	0.1948603	0	1.7537427	0
migratory langerhans cells, donor2.CNhs13536.11902-125F3	0	0	0	0.797189	0	0.3985945	0	1.3286483	0.2657297
migratory langerhans cells, donor3.CNhs13547.11903-125F4	0	0	0	4.5798311	0	0.6542616	0	1.9627848	0
Multipotent Cord Blood Unrestricted Somatic Stem Cells, donor1.CNhs11350.11549-120C1	0	0.2396249	8.6264948	17.9718642	3.8339976	12.7001173	0.4792497	8217.45517	1691.27223
Multipotent Cord Blood Unrestricted Somatic Stem Cells, donor2.CNhs12105.11629-122B9	0	1.148619	13.783433	17.22929	3.445858	14.932052	0	23826.95997	2775.064368
Myoblast, donor1.CNhs10870.11241-116D8	0	0.8686878	2.6060635	15.7811625	3.1851887	2.0269382	6.6599401	1837.274781	332.4178801
Myoblast, donor2.CNhs11965.11322-117D8	0	1.0273816	11.9176265	17.4654874	0	8.0135765	10.0683398	2064.00966	70.8893313
Myoblast, donor3.CNhs11908.11398-118D3	0	1.0743658	0.179061	18.0851573	0	5.192768	11.8180236	1088.153474	251.4015924
nasal epithelial cells, donor1, tech_rep1.CNhs12589.12226-129F3	0	0	13.9879508	12.169518	0	37.207949	0	6.1546982	0
nasal epithelial cells, donor2.CNhs12574.12227-129F4	0	0	6.8428499	18.6623179	1.2441546	29.2376313	0	1669.033289	1440.109
Natural Killer Cells, donor1.CNhs10859.11230-116C6	0	0	0	0	0	3.3495229	0	2.5613999	0
Natural Killer Cells, donor2.CNhs11957.11311-117C6	0	0	0	0	0	1.7250205	0	3.8812964	0
Natural Killer Cells, donor3.CNhs12001.11387-118C1	0	0	0	0.128343	0	4.8770354	0	3.593605	0
Neural stem cells, donor1.CNhs11063.11275-116H6	0.5081892	1.0163785	0	199.972469	57.9335743	9.4015011	1.5245677	93.2527268	36.08144
Neural stem cells, donor2.CNhs11384.11352-117H2	11.712587	0	0	242.060129	79.385313	5.205595	2.602797	58.562938	11.71259
Neurons, donor1.CNhs12338.11494-119E9	7.7328881	0	0	61.8631051	49.4904841	6.9595992	0	66.5028378	8.506177
Neurons, donor2.CNhs12726.11574-120E8	14.238883	0.5025488	0.3350325	106.875377	45.3969079	4.0203903	0.1675163	95.9868205	14.0713663
Neurons, donor3.CNhs13815.11655-122E8	5.1035101	0.6379388	1.2758776	42.7418964	63.1559365	2.5517551	0	75.2767733	12.1208363
Neutrophils, donor1.CNhs10862.11233-116C9	0	0	0	0	0	0	0	1.498014	0
Neutrophils, donor2.CNhs11959.11314-117C9	0	0	0	0	0	0	2.991615	5.983229	0
Neutrophils, donor3.CNhs11905.11390-118C4	0	0	0	0	0	0	0	2.0720776	0
Nucleus Pulposus Cell, donor1.CNhs10881.11252-116F1	0	1.7176809	1.9630639	86.7428847	1.1042235	8.5884044	0.245383	1805.650684	2011.649698
Nucleus Pulposus Cell, donor2.CNhs12019.11409-118E5	0	0.5001705	2.5008526	50.017052	0.5001705	12.504263	0.5001705	2033.193168	1480.504743
Nucleus Pulposus Cell, donor3.CNhs12063.11462-119B4	0	0.54253	3.25518	25.498912	0	19.802346	0	2279.982524	817.592781
Olfactory epithelial cells, donor1.CNhs13816.11933-125I7	0	2.9115921	41.5941724	15.3898438	0.2079709	7.0710093	0.8318835	25436.08418	3449.612681
Olfactory epithelial cells, donor2.CNhs13817.11934-125I8	0	1.605861	33.009364	13.3821741	14.9880351	8.9214496	1.6058609	18661.34778	1574.278969
Olfactory epithelial cells, donor3.CNhs13818.11935-125I9	0	0.4731072	31.6981853	17.3472656	3.6271555	13.7201101	0.6308096	13969.91244	1122.052683
Olfactory epithelial cells, donor4.CNhs13819.11936-126A1	0	1.8742626	50.1365255	23.1940002	0.2342828	8.4341818	2.9285353	14563.13651	948.2597544
Oligodendrocyte - precursors, donor1.CNhs12586.11496-119F2	0	0.5638481	2.2553925	8.457722	3.946937	19.734685	3.383089	825.4736834	371.5759274
Osteoblast - differentiated, donor1.CNhs11311.11276-116H7	0	1.2037844	54.170298	14.7463589	0.3009461	7.5236525	1.2037844	9870.731125	2602.280924
Osteoblast - differentiated, donor2.CNhs11980.11353-117H3	0	0	34.111125	13.64445	0	4.54815	0	6035.39515	1014.237468
Osteoblast - differentiated, donor3.CNhs12035.11425-118G3	0	1.034731	21.729346	14.486229	1.034731	11.382038	5.173654	3626.731144	629.116274
Osteoblast, donor1.CNhs11078.11277-116H8	0	0.9142409	17.8276983	10.0566504	0	15.5420959	0.2285602	7169.248864	590.3710848
Osteoblast, donor2.CNhs11385.11354-117H4	0	0.6642256	25.2405728	15.9414144	0	1.9926768	0.6642256	4848.84687	483.5562357
Osteoblast, donor3.CNhs12036.11426-118G4	0	2.5811684	20.2806087	14.5651644	0	6.6372901	0.9218459	9398.587105	557.7167348
Pancreatic stromal cells, donor1.CNhs10877.11249-116E7	0	18.5062099	28.06340747	26.6732697	17.5504901	12.163706	0.6081853	1486.317813	333.8068467
Pericytes, donor1.CNhs11317.11491-119E6	0	0	16.4472971	15.6640926	0.3916024	22.517133	2.5454151	7018.296688	2066.485416
Pericytes, donor2.CNhs12079.11571-120E5	0	0	7.5491552	11.323733	0	13.7257368	2.4020039	14649.82606	3319.226339
Pericytes, donor3.CNhs12116.11652-122E5	0	1.842813	0.789777	14.479245	0	7.89777	4.738662	8753.625532	1264.959571
Perineurial Cells, donor1.CNhs12587.11499-119F5	0	0.5873671	2.7018885	20.3229009	1.7621013	37.0041261	1.9970481	6287.647123	1843.040425
Perineurial Cells, donor2.CNhs12590.11579-120F4	0	2.34009295	15.60061967	36.1739369	0.6825271	9.06786019	7.70280596	2625.876933	2283.345696
Peripheral Blood Mononuclear Cells, donor1.CNhs10860.11231-116C7	0	0	0	1.0338402	0	4.5488966	0	1.8609123	0
Peripheral Blood Mononuclear Cells, donor2.CNhs11958.11312-117C7	0	0	0	0.4314284	0	4.0985698	0	1.5099994	0
Peripheral Blood Mononuclear Cells, donor3.CNhs12002.11388-118C2	0	0	0	0.747093	0	2.668189	0	1.707641	0.1067276
Placental Epithelial Cells, donor1.CNhs11079.11278-116H9	0	11.5188478	3.0312758	5.4562963	0	9.3969547	0	448.3256783	384.9720157
Placental Epithelial Cells, donor2.CNhs11386.11355-117H5	0	8.321772	56.588049	3.328709	0	18.307899	1.664354	6624.130494	1459.638805
Placental Epithelial Cells, donor3.CNhs12037.11427-118G5	0	6.9549768	40.217909	9.6764894	0	20.2601497	0.3023903	5589.079791	1319.02646
Preadipocyte - breast, donor1.CNhs11052.11467-119B9	0	2.2329703	373.154143	17.8637622	0.7443234	2.7291858	0.4962156	11624.34701	2874.080846
Preadipocyte - breast, donor2.CNhs11971.11328-117E5	0	2.2452808	291.8864982	11.2264038	0	2.5259409	0	21408.19402	2481.596555
Preadipocyte - omental, donor1.CNhs11065.11468-119C1	0	2.0502263	301.383279	11.0199669	0.3844173	2.8190612	0.5125565	16020.60074	3963.343886
Preadipocyte - omental, donor2.CNhs11902.11329-117E6	0	6.140487	206.2180212	6.6521942	3.0702435	3.5819507	0	8749.170544	1947.55779
Preadipocyte - omental, donor3.CNhs12013.11403-118D8	0	0.8042696	125.9486202	12.3857519	0.8042695	2.4128087	0.6434157	24089.80288	3502.272425
Preadipocyte - perirenal, donor1.CNhs12065.11469-119C2	0	0	230.048003	1.484181	0	4.452542	0	10920.60133	1626.662008
Preadipocyte - subcutaneous, donor1.CNhs11081.11279-116I1	0	10.4027316	14.5638244	23.7182282	0.8322186	2.9127649	9.5705131	3915.172075	1274.12657
Preadipocyte - subcutaneous, donor2.CNhs11981.11356-117H6	0.1542097	9.2525816	10.4862592	15.8835984	0.1542097	4.009452	5.8599684	2523.950059	538.5002508
Preadipocyte - subcutaneous, donor3.CNhs12038.11428-118G6	0	6.5697838	60.3709867	19.1766663	0.8878087	9.4107715	1.4204938	5976.905236	1128.93745
Preadipocyte - visceral, donor1.CNhs11082.11280-116I2	0	7.71995267	31.70108222	21.599442	0.9855258	4.8455021	2.7923233	1436.568082	844.0207825
Preadipocyte - visceral, donor2.CNhs11982.11357-117H7	0	3.1155266	0	33.7515379	0	3.634781	17.1353962	2164.252461	788.2282235
Preadipocyte - visceral, donor3.CNhs12039.11429-118G7	0	5.9267293	42.8816297	15.4559804	0.6972622	2.7890491	3.9511529	2454.014562	784.0714235
Prostate Epithelial Cells (polarized), donor1.CNhs10882.11253-116F2	0	0.1208594	0	5.680394	0.1208594	0.4834377	0	6.042972	14.26142
Prostate Epithelial Cells, donor2.CNhs11972.11331-117E8	0	0	18.0455824	21.6546988	0.2005065	12.8324141	0	112.2836238	7.218233
Prostate Epithelial Cells, donor3.CNhs12014.11404-118D9	0	0	27.07181076	19.9815746	0.27624297	20.7182225	0	5.61694034	0.276243
Prostate Stromal Cells, donor1.CNhs10883.11254-116F3	0	7.9221968	0.2296289	18.8295695	0.8037011	4.4777634	0.2296288	4059.379629	2010.056544
Prostate Stromal Cells, donor2.CNhs11973.11332-117E9	0	9.1045584	0.1820912	28.0420399	0	8.0120115	0.3641824	3982.515936	1483.132563

Prostate Stromal Cells, donor3.CNhs12015.11405-118E1	0	5.2449766	0.2622488	39.8618221	0	6.949594	0.3933732	4039.8121	927.3118626
Renal Cortical Epithelial Cells, donor1.CNhs11331.11516-119H4	0	0	2.7071976	7.6703934	0.4511996	20.3039826	0.9023992	39.2543662	1.804798
Renal Cortical Epithelial Cells, donor2.CNhs12728.11596-120H3	0	0.46209202	2.1564294	14.0938067	0.15403068	10.7821472	0.07701534	17.94457358	0.6161227
Renal Epithelial Cells, donor1.CNhs11332.11517-119H5	0	0	5.4904484	24.3148429	0	31.3739908	7.0591479	524.7299958	21.96179
Renal Epithelial Cells, donor2.CNhs12088.11597-120H4	0	0	7.30696	13.152529	0	18.998099	1.461392	138.832261	10.22975
Renal Epithelial Cells, donor3.CNhs12732.11678-122H4	0	0.4222065	3.9054102	30.2933175	0	8.1274755	0.2111033	50.5592298	1.3721711
Renal Glomerular Endothelial Cells, donor1.CNhs12074.11514-119H2	0	0	0	3.412002	0	4.549335	578.902925	85.300039	7.961337
Renal Glomerular Endothelial Cells, donor2.CNhs12086.11594-120H1	0	1.3607496	0	3.9121552	0.1700937	2.7214993	429.486606	3.0616867	0
Renal Glomerular Endothelial Cells, donor3.CNhs12624.11675-122H1	0	1.2954955	3.6705705	21.1597598	0.6477477	7.9888889	181.153454	1288.370271	2.806907
Renal Glomerular Endothelial Cells, donor4.CNhs13080.11783-124B1	0	0	6.169091	12.338181	0	16.964999	1031.78032	822.031264	1.542273
Renal Mesangial Cells, donor1.CNhs11333.11518-119H6	0	0.2709464	15.9858398	19.5081435	0	15.9858397	2.7094644	1522.71898	53.64739
Renal Mesangial Cells, donor2.CNhs12089.11598-120H5	0	0	23.26051	10.73562	1.78927	3.57854	1.78927	4712.936765	189.6626
Renal Mesangial Cells, donor3.CNhs12121.11679-122H5	0	0	23.5794194	12.0405545	0	31.104766	0	3889.600817	71.2399479
Renal Proximal Tubular Epithelial Cell, donor1.CNhs11330.11515-119H3	0	0.7646288	0	2.0390101	0	11.2145559	0.2548763	5.6072781	4.0780204
Renal Proximal Tubular Epithelial Cell, donor2.CNhs12087.11595-120H2	0	0	0.831076	4.15538	0	11.635064	6.648608	16.62152	9.972912
Renal Proximal Tubular Epithelial Cell, donor3.CNhs12120.11676-122H2	0	0	3.8058708	8.9549902	0	12.0892368	1.5671233	223.8747556	6.940117
Retinal Pigment Epithelial Cells, donor0.CNhs10842.11215-116A9	0.2564501	0	17.4386085	4.3596522	0	3.8467518	1.2822506	9.2322045	2.308051
Retinal Pigment Epithelial Cells, donor1.CNhs11338.11528-119I7	0	0	62.6507972	11.4805125	0	8.2003661	0.6560293	364.0962559	52.15433
Retinal Pigment Epithelial Cells, donor2.CNhs12096.11608-120I6	0	0	42.455929	3.26584	0	6.531681	1.63292	729.915403	17.96212
Retinal Pigment Epithelial Cells, donor3.CNhs12733.11689-122I6	0	2.2776488	19.8480822	8.4598383	0	8.7852167	0.9761352	73.2101389	26.35565
salivary acinar cells, donor1.CNhs12810.11771-123I7	0	0.2072162	12.8474022	20.307184	0	9.7391598	0	9.3247275	1.657729
salivary acinar cells, donor2.CNhs12811.11772-123I8	0	0.1707185	44.5575227	20.486217	0	5.121554	0	34.6558512	172.425662
salivary acinar cells, donor3.CNhs12812.11773-123I9	0	0	44.9318781	13.1339336	0	2.073779	0.6912597	64.9784087	29.0329058
Schwann Cells, donor1.CNhs12073.11498-119F4	0	0	3.6185684	8.7879519	0.2584692	23.2622257	9.0464211	7176.655072	414.8430236
Schwann Cells, donor2.CNhs12345.11578-120F3	0	0	0	8.767442	0	26.302326	13.151163	648.790717	30.68605
Schwann Cells, donor3.CNhs12621.11659-122F3	0.2633685	0	2.8970538	15.5387431	0.5267371	12.1149523	4.2138964	6245.784633	248.61989
Sebocyte, donor1.CNhs10847.11220-116B5	0	0	33.8816667	21.8220904	0	7.465452	4.0198588	651.2171198	67.7633334
Sebocyte, donor2.CNhs11951.11301-117B5	0	0	24.052229	18.851746	0	25.352349	0	323.0799415	19.5018073
Sebocyte, donor3.CNhs11995.11378-118B1	0	0.5959438	73.5990605	15.494539	0.8939157	18.1762862	1.4898595	1929.666058	515.4913959
Sertoli Cells, donor1.CNhs10851.11255-116F4	0	6.427357	9.641036	22.49575	0	4.820517	3.213679	5710.706861	3952.824675
Sertoli Cells, donor2.CNhs11974.11333-117F1	0	0	314.77157	34.131858	0	0	3.792429	6625.372674	4232.35026
Skeletal muscle cells differentiated into Myotubes - multinucleated, donor1.CNhs11084.11282-116I4	0	1.69160869	20.29930414	27.5999311	0.17806407	14.957382	1.78064072	8338.384	4762.234554
Skeletal muscle cells differentiated into Myotubes - multinucleated, donor2.CNhs11984.11359-117H9	0	0.95559	29.62329	7.64472	0	30.57888	20.06739	776.89464	119.44875
Skeletal muscle cells differentiated into Myotubes - multinucleated, donor3.CNhs12041.11431-118G9	0	1.9213351	18.786388	24.7638749	0.2134817	10.6740839	1.2808901	4332.18374	1299.036025
Skeletal Muscle Cells, donor1.CNhs11083.11281-116I3	0	3.1901337	10.633779	31.224642	0.09667072	38.088263	5.22021878	897.68429	687.9088314
Skeletal Muscle Cells, donor2.CNhs11983.11358-117H8	0	0	18.469917	12.313277	0	29.244035	9.234959	6170.491334	838.842051
Skeletal Muscle Cells, donor3.CNhs12040.11430-118G8	0	3.5958949	5.3938422	13.4846059	0	17.0805006	17.0805007	2108.992357	437.8002038
Skeletal Muscle Cells, donor4.CNhs12053.11451-119A2	0	0.6161945	2.002632	24.1856328	0.3080972	5.237653	1.2323889	1316.653531	736.0442925
Skeletal Muscle Cells, donor5.CNhs12056.11455-119A6	0	1.6885404	4.6051102	23.4860621	0.1535037	5.219125	1.5350368	2173.151523	1059.328859
Skeletal Muscle Cells, donor6.CNhs12060.11459-119B1	0	3.4459143	0.6891829	14.7485132	0	5.9269726	2.618895	1900.077152	483.5306964
Skeletal Muscle Satellite Cells, donor1.CNhs10869.11240-116D7	0	1.2890429	2.6855061	38.6712881	0.3222606	10.4197637	0.7519417	2405.891224	2427.375273
Skeletal Muscle Satellite Cells, donor2.CNhs11964.11321-117D7	0	0.8701002	7.5408682	34.3689565	0.2900334	12.4714358	1.0151169	3911.245252	1469.309143
Skeletal Muscle Satellite Cells, donor3.CNhs12008.11397-118D2	0	1.78975918	2.21589231	23.2668693	0.25567988	8.18175623	2.89770533	1884.616412	616.5294227
Small Airway Epithelial Cells, donor1.CNhs10884.11256-116F5	0	0	12.8922234	17.8507709	0.3305698	17.354916	0.1652849	135.6989148	0.9917095
Small Airway Epithelial Cells, donor2.CNhs11975.11334-117F2	0	0	29.5972704	19.987767	0	29.7894605	0.1921901	469.9047147	3.267231
Small Airway Epithelial Cells, donor3.CNhs12016.11406-118E2	0	0	48.7580504	19.5234518	0.4046311	33.1797522	0.1011578	140.5081578	1.921998
Smooth muscle cells - airway, asthmatic, donor1.CNhs14183.11960-126C7	0	0.5886897	82.1222083	56.8085526	9.1246898	5.0038621	0	9767.244569	7979.394058
Smooth muscle cells - airway, asthmatic, donor2.CNhs14184.11961-126C8	0	2.6024265	12.5783949	9.5422307	0.4337378	5.2048531	0	5187.503583	570.7988892
Smooth muscle cells - airway, asthmatic, donor3.CNhs14186.11962-126C9	0	1.7216569	27.546511	40.1719938	21.8076538	6.8866275	0	3488.650722	5074.870592
Smooth muscle cells - airway, asthmatic, donor4.CNhs14187.11963-126D1	0	0.9117813	16.4120638	25.5298766	2.2794534	4.5589065	0	1949.388439	727.1455938
Smooth muscle cells - airway, asthmatic, donor5.CNhs14188.11964-126D2	0	4.1614314	10.4035785	13.7327237	1.6645726	2.9130019	0	456.9251672	150.2276733
Smooth muscle cells - airway, asthmatic, donor6.CNhs14189.11965-126D3	0	0.4661148	6.9917217	16.3140174	0	11.1867548	0	2859.148062	386.4091528
Smooth muscle cells - airway, control, donor1.CNhs14190.11966-126D4	0	2.3275845	93.8792402	24.439637	0	7.3706841	0	5344.133951	3543.74736
Smooth muscle cells - airway, control, donor2.CNhs14191.11967-126D5	0	1.2176739	128.464596	51.1423037	1.8265108	10.959065	0	3847.849513	3310.246488
Smooth muscle cells - airway, control, donor3.CNhs14192.11968-126D6	0	3.3570986	121.5269717	13.4283946	0.6714197	9.3998762	0	5862.837109	2188.82833
Smooth muscle cells - airway, control, donor4.CNhs14193.11969-126D7	0	1.9640784	66.1239711	7.8563134	0.6546928	11.1297773	0	4801.516855	2237.085232
Smooth Muscle Cells - Aortic, donor0.CNhs10838.11210-116A4	0	5.5762982	29.9726028	22.3051927	0.6970373	5.5762982	1.3940745	1527.905696	483.0468282
Smooth Muscle Cells - Aortic, donor1.CNhs11085.11283-116I5	0.3080336	7.7008395	48.3612721	19.7141491	0	7.3928059	0.3080336	2661.410132	3243.285566
Smooth Muscle Cells - Aortic, donor2.CNhs11305.11360-117I1	0	3.726142	27.679913	10.64612	0	4.790754	0.532306	1557.527443	487.060018
Smooth Muscle Cells - Aortic, donor3.CNhs11309.11432-118H1	0	1.739866	28.707789	16.528727	0	5.219598	1.739866	1411.031314	441.056027
Smooth Muscle Cells - Bladder, donor1.CNhs12893.11519-119H7	0	7.465117	17.418606	32.348841	2.488372	4.976745	0	4644.547116	5124.802993
Smooth Muscle Cells - Brachiocephalic, donor1.CNhs11086.11284-116I6	0	0.3706484	105.2641564	24.462797	0	3.3358359	0.1853242	1545.603987	375.8375165
Smooth Muscle Cells - Brachiocephalic, donor2.CNhs11985.11361-117I2	0	0.9914419	148.9641457	51.8028394	1.4871629	1.487163	0.495721	4318.96878	3445.756326
Smooth Muscle Cells - Brachiocephalic, donor3.CNhs12043.11433-118H2	0	1.5743738	35.6380969	31.6306	0	0.7156245	0	1033.934182	705.6056917
Smooth Muscle Cells - Brain Vascular, donor1.CNhs10863.11234-116D1	0	0	0	26.7954027	0.3721584	14.5141765	3.7215837	2234.43885	1160.017637
Smooth Muscle Cells - Brain Vascular, donor2.CNhs11900.11315-117D1	0	2.214656	2.5310354	45.8750165	0.6327588	5.6948295	0	4596.676661	1132.005582
Smooth Muscle Cells - Brain Vascular, donor3.CNhs12004.11391-118C5	0	0.5718906	0.953151	31.6446122	0	4.0032342	0.1906302	9302.753464	2395.077756
Smooth Muscle Cells - Bronchial, donor1.CNhs11328.11512-119G9	0	0.5117956	9.4682184	3.0707735	0.2558978	14.3302764	1.0235912	4144.008833	671.9876
Smooth Muscle Cells - Bronchial, donor2.CNhs12348.11592-120G8	0	0.427939	14.121987	24.392523	0	10.270536	0	7176.536835	1022.346243
Smooth Muscle Cells - Carotid, donor1.CNhs11087.11285-116I7	0	5.4094552	101.506836	26.4108696	0	7.6368779	8.2732844	2819.280776	2442.846334
Smooth Muscle Cells - Carotid, donor2.CNhs11986.11362-117I3	0	0	88.151814	0	0	9.794646	0	822.750269	352.607258
Smooth Muscle Cells - Carotid, donor3.CNhs12044.11434-118H3	0	0.7849486	17.26887	14.1290756	0	5.4946403	1.5698972	3613.903539	657.7869604
Smooth Muscle Cells - Colonic, donor1.CNhs10868.11239-116D6	0	1.7987246	5.7559188	30.2185729	3.0578318	5.0364289	1.2591072	3441.319858	3067.724764
Smooth Muscle Cells - Colonic, donor2.CNhs11963.11320-117D6	0	1.3726851	12.6287033	22.7865734	0.549074	6.5888886	0.8236111	8036.797008	4238.302663
Smooth Muscle Cells - Colonic, donor3.CNhs12007.11396-118D1	0	2.7096853	4.9481208	20.8527952	1.178124	8.3646806	0.8246868	5516.09449	2807.233923
Smooth Muscle Cells - Coronary Artery, donor1.CNhs11088.11286-116I8	0	3.4371022	34.5732044	10.917854	0	6.267657	0.8087299	1686.606262	450.6647516
Smooth Muscle Cells - Coronary Artery, donor2.CNhs11987.11363-117I4	0	1.585103	96.691296	19.021238	0	0	0	2062.219275	280.563268
Smooth Muscle Cells - Coronary Artery, donor3.CNhs12045.11435-118H4	0	2.5275508	34.5431935	16.0078213	0	6.3188768	3.7913261	2011.509129	613.7735708
Smooth Muscle Cells - Esophageal, donor1.CNhs11324.11508-119G5	0	0.4876337	0.4876337	7.3145061	0	15.6042796	0	5776.509273	1427.791588
Smooth Muscle Cells - Esophageal, donor2.CNhs12727.11588-120G4	0	0	3.84962655	19.4192273	0.59883079	10.6078598	0.17109452	1898.550595	2063.057641
Smooth Muscle Cells - Internal Thoracic Artery, donor1.CNhs11067.11287-116I9	0	0.4622688	215.417258	39.0617131	1.8490752	2.88918	0.2311344	2131.636976	351.2087162
Smooth Muscle Cells - Internal Thoracic Artery, donor2.CNhs11988.11364-117I5	0	9.2611126	10.723393	24.8587759	0	7.3114047	0.487427	1443.027572	1138.141997
Smooth Muscle Cells - Internal Thoracic Artery, donor3.CNhs12046.11436-118H5	0	3.169504	19.017025	7.395509	0	1.056501	0	1217.089683	634.957381
Smooth Muscle Cells - Intestinal, donor1.CNhs12595.11509-119G6	0	2.8821291	0.4117328	10.293318	0.6175991	7.2053226	0.4117327	688.6229738	518.1656274
Smooth Muscle Cells - Prostate, donor1.CNhs11920.11257-116F6	0	9.6914937	1.9109987	39.5849742	0.2729998	3.8219974	0.4094997	3705.563095	1633.49444
Smooth Muscle Cells - Prostate, donor2.CNhs11976.11335-117F3	0	3.6765412	1.4140544	43.4114676	0.2828108	4.6663794	0.1414054	8410.653687	3899.820409
Smooth Muscle Cells - Prostate, donor3.CNhs11910.11465-119B7	0	0.3974844	15.8993749	18.2842812	0	3.9748437	1.1924531	2672.68493	2187.753994
Smooth Muscle Cells - Pulmonary Artery, donor1.CNhs11089.11288-117A1	0	6.9916724	29.5203946	8.0792659	0	2.175187	9.7883413	3011.85709	1057.762346
Smooth Muscle Cells - Pulmonary Artery, donor2.CNhs11989.11365-117I6	0	2.260162	80.235762	6.780486	0	6.780487	3.390243	6166.852914	2923.519977
Smooth Muscle Cells - Pulmonary Artery, donor3.CNhs12047.11437-118H6	0	0	0	4.683119	0	6.244159	366.844352	35488.67862	20457.42647
Smooth Muscle Cells - Subclavian Artery, donor1.CNhs11090.11289-117A2	0	0.5513653	120.74901	30.8764593	0.5513653	3.308192	1.1027307	3458.163435	1649.685108
Smooth Muscle Cells - Subclavian Artery, donor2.CNhs11990.11366-117I7	0	4.644073	74.968605	14.595658	0	5.307512	0.663439	1038.945439	360.247364
Smooth Muscle Cells - Subclavian Artery, donor3.CNhs12048.11438-118H7	0	2.1922544	93.3900386	14.0304283	0	5.2614107	0.8769018	802.8035712	273.5933525
Smooth Muscle Cells - Tracheal, donor1.CNhs11329.11513-119H1	0	0	5.7877553	6.3665309	0	6.9453064	4.0514287	3176.320132	847.9061576
Smooth Muscle Cells - Tracheal, donor2.CNhs12567.11593-120G9	0	1.53943985	0.461832	11.8536868	0.46183195	7.38931127	0.84669191	1384.880401	370.004367
Smooth Muscle Cells - Tracheal, donor3.CNhs12894.11674-122G9	0	0.6558948	2.6235791	17.7091584	0.6558948	13.7737899	0.6558948	4931.016747	1749.927199

Smooth Muscle Cells - Umbilical artery, donor0.CNhs10839.11212-116A6	0	0.3566711	40.6605	9.986789	0	4.993395	0	2306.948362	577.8071035
Smooth Muscle Cells - Umbilical Artery, donor1.CNhs11091.11290-117A3	0	0.8116415	43.8286415	7.9135047	0	4.6669387	0	2020.378624	630.0367204
Smooth Muscle Cells - Umbilical Artery, donor2.CNhs11991.11367-117I8	0.3098235	1.858941	22.9269389	7.435764	0.3098235	5.576823	3.098235	1541.371904	300.2189697
Smooth Muscle Cells - Umbilical Artery, donor3.CNhs12049.11439-118H8	0	3.6620428	30.7048206	7.6057812	0.2816956	6.1973032	1.6901736	3771.340726	612.969631
Smooth Muscle Cells - Umbilical Vein, donor1.CNhs12597.11541-120B2	0	3.7286952	10.8992629	8.1744471	0.1434114	13.1938445	0.2868227	2169.670348	1397.543627
Smooth Muscle Cells - Umbilical Vein, donor2.CNhs12569.11621-122B1	0	1.37548657	11.39688876	12.6741263	0.09824904	8.54766657	0.19649808	5572.292412	3468.092899
Smooth Muscle Cells - Umbilical Vein, donor3.CNhs13076.11702-123B1	0	0	30.191836	4.117068	0	35.681262	0	5131.239939	1394.313929
Smooth Muscle Cells - Uterine, donor1.CNhs11921.11258-116F7	0	9.689352	4.6139772	29.2987552	0.2306989	4.6139772	0.2306989	5945.340313	1633.809324
Smooth Muscle Cells - Uterine, donor3.CNhs11927.11466-119B8	0	7.8047434	0.7095222	9.2237876	0.7095221	11.7071152	1.0642832	1240.24468	323.1873294
Synoviocyte, donor1.CNhs11068.11291-117A4	0	0.784143	246.0248639	16.0749314	0.3920715	1.9603574	0.3920714	8240.754748	2383.598663
Synoviocyte, donor2.CNhs11992.11368-117I9	0	0.6333229	367.327286	11.6109199	0	9.7109512	0.6333229	3589.040907	619.1786943
Synoviocyte, donor3.CNhs12050.11440-118H9	0	1.3171796	399.10541	22.721347	0	13.171795	0	4305.201431	1476.229005
tenocyte, donor1.CNhs12639.11763-123H8	0	1.859975	144.334067	18.227756	0.371995	8.555885	2.603965	24556.50714	5933.692535
tenocyte, donor2.CNhs12640.11765-123I1	0	0.4621756	27.7305377	13.4030931	0	11.0922151	0.4621756	12753.27573	2314.113373
tenocyte, donor3.CNhs12641.11768-123I4	0	2.1631328	328.7961872	12.1135437	0.4326266	11.6809171	6.4893984	21164.09099	4959.198282
Trabecular Meshwork Cells, donor1.CNhs11340.11532-120A2	0	4.1742049	17.0762929	11.004722	1.5178927	6.4510439	0.7589463	2193.734417	614.7465415
Trabecular Meshwork Cells, donor2.CNhs12097.11612-122A1	0	0	21.969308	8.787723	4.393862	35.150893	8.787724	1819.058704	123.028125
Trabecular Meshwork Cells, donor3.CNhs12124.11693-123A1	0	0.6998694	24.8453652	15.7470623	5.9488902	27.6448429	0.6998694	3233.74675	563.3948994
Tracheal Epithelial Cells, donor1.CNhs11092.11292-117A5	0	0	8.3713238	9.52598916	0	18.2822014	0.09622211	13.37487366	0.09622211
Tracheal Epithelial Cells, donor2.CNhs11993.11369-118A1	0	0.6703023	7.3733251	5.362419	0	10.054534	2.010907	226.5621697	56.30539
Tracheal Epithelial Cells, donor3.CNhs12051.11441-118I1	0	0	6.53346	5.44455	0	21.778197	0	25.044927	0
Urothelial cells, donor0.CNhs10843.11216-116B1	0	0	17.229255	13.0942338	0	11.48617	0.2297234	14.0131274	0.2297234
Urothelial Cells, donor1.CNhs11334.11520-119H8	0	0	15.4981934	6.4575806	0	8.1796021	0.4305054	36.1624514	0.4305054
Urothelial Cells, donor2.CNhs12091.11600-120H7	0	0	15.162433	6.73886	0	3.36943	0	47.172015	0
Urothelial Cells, donor3.CNhs12122.11681-122H7	0	0	27.0492395	4.4343016	0	7.9817429	0.4434302	40.3521444	0
Whole blood (ribopure), donor090309, donation1.CNhs11675.12179-129A1	0	0	0	0.5074476	0	2.0297904	0	0	0
Whole blood (ribopure), donor090309, donation2.CNhs11671.12180-129A2	0	0	0	0	0	0.7646372	0	0	0
Whole blood (ribopure), donor090309, donation3.CNhs11948.12181-129A3	0	0	0	0	0	0	0	0	0
Whole blood (ribopure), donor090325, donation1.CNhs11075.12176-128I7	0	0	0.2382318	0.4764636	0	1.9058543	0.2382318	0	0
Whole blood (ribopure), donor090325, donation2.CNhs11076.12177-128I8	0	0	0.4113623	0.4113623	0	1.6454491	0.4113623	0	0
Whole blood (ribopure), donor090612, donation1.CNhs11672.12182-129A4	0	0	0	0.6484733	0	0.6484733	1.2969466	0	0
Whole blood (ribopure), donor090612, donation2.CNhs11673.12183-129A5	0	0	0	0.5400314	0	1.6200943	0	0	0
Whole blood (ribopure), donor090612, donation3.CNhs11949.12184-129A6	0	0	0	0	0	3.1725008	0	1.5862504	0

	Baseline-8W		Baseline-1Y	
CD1	Slit3$^{+/+}$	Slit3$^{-/-}$	Slit3$^{+/+}$	Slit3$^{-/-}$
n	8	8	14	19
BW (g)	36±4.63	31.63±2.2*	50.43±4.42	40.79±5.18§
HR (bpm/min)	443±80	434±57	497±71	496±72
Diastole				
LVV (µl)	83±10	67±14*	77±14	73±17
LVID (mm)	4.31±0.22	3.92±0.35*	4.15±0.33	4.05±0.42
IVST(mm)	0.72±0.07	0.64±0.06*	0.8±0.13	0.82±0.11
PWT (mm)	0.78±0.15	0.68±0.08	0.8±0.13	0.81±0.15
Systole				
LVV (µl)	32±6	28±9	36±14	31±12
LVID (mm)	2.91±0.23	2.7±0.42	2.98±0.51	2.82±0.46
IVST (mm)	1.1±0.1	0.95±0.05$^{#}$	1.19±0.24	1.17±0.18
PWT (mm)	1.2±0.21	1.07±0.12	1.16±0.18	1.22±0.26
LV EF (%)	61±6	60±8	54±13	58±9
LV FS (%)	32±4	31±5	28±9	31±6
LVM (mg)	121±17	87±13§	125±19	123±20
LVM index	3.4±0.42	2.78±0.42*	2.52±0.51	3.05±0.57$^{#}$
Mitral valve				
E (m/s)	843±111	847±128	758±135	820±180
A (m/s)	506±168	631±368	494±146	410±129
E/A ratio	1.8±0.52	1.8±0.61	1.5±0.29	2±0.67$^{#}$

Supplemental Table 2. Echocardiography parameters in baseline CD1 mice. BW, body weight; HR, heart rate; LVV, left ventricular (LV) volume; LVID, LV internal dimension; IVST, interventricular septum thickness; PWT, posterior wall thickness; LV EF, LV ejection fraction; LV FS, LV fractional shortening; LVM, LV mass. E, A, E/A ratio, early diastolic (E) and late diastolic velocities (A) and ratio of early vs late diastolic velocity (E/A). Data are presented as mean±SD. Number (n). *P < 0.05; $^{#}$P < 0.01; §P < 0.001 vs. WT age-matched mice using the unpaired two-tailed Student's t-test.

Supplemental Methods

Mouse Cardiac Models

Mouse cardiac procedures were performed as previously described under the operating microscope (1). Briefly, 7-9 weeks old CD1 WT and *Slit3*$^{-/-}$ mice were selected and their body weight ranged from 25 to 35g. Mice were anesthetized using 2.5% isoflurane, intubated with a 20-gauge angiocatheter, and artificially ventilated with a Kent Scientific Physio Suite.

For transverse aortic constriction (TAC), a limited median sternotomy was performed from the suprasternal notch to the second rib. The transverse aorta was freed by dissection using a 26-gauge blunt hook, and 6-0 silk suture was placed around the aorta between the innominate and the left common carotid artery using a 23-gauge ligation aid. A loose double knot was made, and a blunt 26-gauge needle was placed over the aortic arch. The suture was then tightened, and the blunt needle was immediately removed. Two additional knots were performed to secure the tie.

For pulmonary artery banding (PAB), a left lateral thoracotomy under the second rib was performed, and the main pulmonary trunk was identified under the left atrial appendage. The main pulmonary trunk was freed by dissection using a 26-gauge blunt hook, and a 6-0 silk suture was placed around the main pulmonary trunk using a 23-gauge ligation aid. A loose double knot was made, and a blunted 24-gauge needle was placed over the main pulmonary trunk. The suture was then tightened, and the blunt needle was immediately removed. Two additional knots were performed to secure the tie.

For left anterior descending (LAD) coronary artery ligation, a left lateral thoracotomy under the third rib was performed, and the LAD coronary artery was visualized running from underneath of the left atrium toward the apex. If the LAD artery couldn't be visualized, the left atrium could be lifted so that the origin of the LAD artery from the aorta was located. The LAD artery was ligated 1 mm below the tip of the left auricle in its normal position, with 6/0 silk suture and three knots, which induced roughly 40–50% ischemia of the LV. Occlusion was confirmed by the color change, becoming pale, of the anterior wall of LV.

After thoracic procedures, the chest cavity and skin wound were closed with 6/0 suture, and air in the chest cavity was evacuated by 20-gauge angiocatheter. Until spontaneous breathing resumed, the tracheal intubation was removed, and the mice were transferred to an oxygen cage until totally anesthesia recovery. At 3 days after TAC or PAB, all surviving mice underwent echocardiography to measure peak aortic or pulmonary arterial pressure gradient. Mice with peak aortic gradient less than 25 mmHg after TAC and mice with peak pulmonary arterial gradient less than 20 mmHg after PAB were excluded. All these mice with satisfactory surgery and survived for the first 24 hours were included in the overall survival curve analysis. The mice were sacrificed due to staggered time points analysis, for example, 1, 3 and 8 weeks after TAC and 2 and 4 weeks after PAB, and other obvious non-cardiac vascular problems were record as censored.

Echocardiography

Trans-thoracic echocardiography was performed by the University of Michigan Cardiovascular Phenotyping Core, as previously described (2). Briefly, the induction of

anesthesia was performed with 6% isoflurane. Animals were then placed on a warming pad to maintain normothermia. In all studies, maintenance isoflurane (1-1.5%) was delivered with 100% oxygen, and the mice were anesthetized for less than 30 min in total. After the application of depilatory cream to the chest and upper abdomen, ECG electrodes were placed. Two-dimensional, M-mode, Doppler, and tissue Doppler echocardiography images were recorded using a Visual Sonics Vevo 2100 high-resolution in vivo microimaging system with an MS 550D transducer that has a center frequency of 40 MHz and a bandwidth of 22–55 MHz with the animal in a supine or lateral position. The LV ejection fraction was calculated from the two-dimensional long-axis view. The LV systolic and diastolic dimensions and wall thickness were determined by M-mode in the parasternal short-axis view at the level of the papillary muscles. Fractional shortening and ejection fraction were also determined from the M-mode parasternal short-axis view. The determination of RV parameters was performed as described by Shah et al (3). Briefly, a modified parasternal long-axis view and a modified parasternal short axis view were used to determine RV dimensions and RV fractional shortening, respectively.

Primary murine cell isolation and culture

Cells were isolated from 6-8 weeks old CD1 WT and *Slit3*$^{-/-}$ mice. Cardiac fibroblasts and cardiomyocytes (4), lung fibroblasts (5), as well as aortic adventitial fibroblasts and vascular smooth muscle cells (6) were isolated and cultured as described. Briefly, the 100X collagenase, 100X elastase, EDTA, cardiac perfusion, HBSS, and PBS buffers were freshly prepared for each isolation. After being anesthetized and cleaned with 70% ethanol, a sternotomy was performed to expose the heart. The right ventricle (RV) was injected with 10 ml of 4°C PBS to flush the blood from the heart, lungs, and aorta. After clamping the ascending aorta, the heart was removed. Then the LV was perfused with 20 ml EDTA buffer for 7 minutes and 5 ml perfusion buffer for 2 minutes. The lung and aorta were then removed and stored in HBSS buffer at 4°C. The LV was perfused with 20 ml of 37°C 1X cardiac collagenase buffer for about 30 minutes and then gently teased apart while bathed in perfusion buffer. The resulting cell suspension was passed through a 100 μm filter and then underwent four sequential rounds of gravity precipitation to gradually restore the calcium concentration. The cell pellet represented a highly pure cardiomyocyte fraction, and the supernatants were combined, centrifuged at 50 x g for 1 minute to remove the remaining cardiomyocytes, and then centrifuged at 200 x g for 5 minutes to collect cardiac fibroblasts.

For isolation of lung fibroblasts, the harvested lungs were cut into small pieces and digested with 1X collagenase buffer for 3-5 hours at 37°C until the pieces could be mixed with 200 μl pipette tips. For aortic cell isolation, the thoracic aorta was immersed in 37°C 1X collagenase buffer for 10 minutes to loosen the connection between the media and adventitia. Fine forceps were then used to gently remove the adventitia from the media under an operating microscope. The aortic adventitia was cut into small pieces and digested with 1X collagenase buffer for 1-2 hours at 37°C. The aortic media was cut into small pieces and digested with 1X collagenase/elastase buffer for 1-2 hours at 37°C. All these digested tissue suspensions were diluted with HBSS buffer and centrifuged at 200 x g for 5 minutes to remove collagenase or elastase in the supernatant. Then all tissue pellets

were resuspended in DMEM/F12 medium containing 10% FBS, 4 ng bFGF, and 1X antibiotic/antimycotic. Isolated cells were cultured in a humidified tissue culture incubator at 37°C, 5% CO_2, and not moved in the first three days. Thereafter, the medium was renewed every 24 hours. When 90% confluence was reached, cells were passaged using TrypLE™ Express (Gibco) at the ratio of 1:2. Fibroblasts and VSCMCs were used at passage<4.

Sequences of RT qPCR primer pairs

Gapdh, 95bp, Forward primer CTGCGACTTCAACAGCAACT, Reverse primer TCTTGCTCAGTGTCCTTGCT

Slit3, 104bp, Forward primer GCGCGATTTGGAGATCCTCA, Reverse primer TGGAGTGTAGACGCAGAGTCC;

Robo1, 132bp, Forward primer CCTTCAGACCTGATCGTCTCC, Reverse primer TGAGCGCGGGTCATCTTTG;

Nppa, 126bp, Forward primer GCTTCCAGGCCATATTGGAG, Reverse primer GGGGGCATGACCTCATCT*;*

Nppb, 222bp, Forward primer AAGCTGCTGGAGCTGATAAGA, Reverse primer GTTACAGCCCAAACGACTGAC;

Myh7, 119bp, Forward primer CCTGCGGAAGTCTGAGAAGG, Reverse primer CTCGGGACACGATCTTGGC;

Ctgf, 151bp, Forward primer GGGCCTCTTCTGCGATTTC, Reverse primer ATCCAGGCAAGTGCATTGGTA*;*

Col1a1, 103bp, Forward primer GCTCCTCTTAGGGGCCACT, Reverse primer CCACGTCTCACCATTGGGG*;*

Col3a1, 154bp, Forward primer ACGTAGATGAATTGGGATGCAG, Reverse primer GGGTTGGGGCAGTCTAGTG*;*

Yap1, 176bp, Forward primer ACCCTCGTTTTGCCATGAAC, Reverse primer TTGTTTCAACCGCAGTCTCTC*;*

Acta2, 98bp, Forward primer CTGACAGAGGCACCACTGAA, Reverse primer CATCTCCAGAGTCCAGCACA*;*

Fn1, 124bp, Forward primer ATGTGGACCCCTCCTGATAGT, Reverse primer GCCCAGTGATTTCAGCAAAGG.

Cell functional assays.

MTT cell proliferation assay. Aortic adventitial fibroblasts were seeded in two 96-well plates (0-hour timepoint plate and 48-hour timepoint plate) at 8,000 cells per well and incubated at 37°C, 5% CO_2 for 6 h. Then, 20 µl of MTT reagent (5 mg/ml) was added to each well of the 0-hour timepoint plate, and the wells of the 48-hour timepoint plate were renewed with PBS or PDGF-BB (100 ng/ml) added to media with 10% FBS. Forty-eight hours later, 20 µl MTT reagent was added to each well of the 48-hour timepoint plate. After the addition of MTT reagent, the cells were incubated for another 4 hours until a purple-colored precipitate was visible. Next, the medium from the wells was aspirated and 150 µl of MTT solvent was added to each well. The plates were covered with foil and placed on an orbital shaker for 20 minutes. The absorbance of each well was measured using a spectrophotometer at 560

nm and a reference filter at 750 nm. Then the optical density (OD) of each well at 560 nm was determined by subtracting the absorption at the reference wavelength (750 nm). Next, the corrected OD values were normalized to the starting cell numbers by dividing by the average OD value of the 0-hour timepoint wells.

Scratch wound and migration assay. Fibroblast migration was determined by in vitro scratch wound healing assays in 6-well plates. When the fibroblasts reached 100% confluence, they were synchronized in 1% FBS medium for 24 hours. Then a linear scratch was created with a 200 µl pipette tip and cells were subjected to PBS or PDGF-BB (100 ng/ml) treatment for 24 hours. Changes in the wound area were imaged at 0 and 24 hours and quantified using Image-Pro Plus (version 7).

Floating collagen gel contraction assay. Floating fibroblast collagen gel contraction assays were performed in 24-well plates. Each well was seeded with 3×10^5 cells mixed in 500 µl collagen gel (1mg/ml collagen type I). Collagen gel was made with 0.5% FBS medium and 3.83 mg/ml rat tail collagen type 1 gel (Corning, Ref 354236). Either PBS or TGFβ1 (5.0 ng/ml) was added to the collagen gel. After gelation for one hour, the collagen gel was detached from the well bottom using a 10 µl pipette tip and allowed to float. Digital images of the floating gels were then acquired at 0 and 24 hours and the gel areas were quantified using Image-Pro Plus (version 7).

Supplemental References

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Full unedited gel for Figure 7H