

Supplemental Table 1: Statistical Analysis of GFP-Positive Cells from Collagen Gel Explant Assays

Figure Number	AVC or Ventricle	Condition	Total Number of explants	Total Number of GFP+ cells	Number of Epithelial Cells (%)	Number of Activated Cells (%)	Number of Transformed Cells (%)
Figure 1B	AVC	GFP,	27	1524	821 (53±2.1%)	169 (11±0.4%)	534 (35±1.7%)
	AVC	Ephrin-A1	23	602	460 (76±3.0%)**	49 (8±1.6%)	93 (16±1.4%)**
Figure 1C	Ventricle	GFP	23	534	418 (79±3.2%)	59 (11±0.7%)	57 (10±2.5%)
	Ventricle	WT EphA3	22	473	249 (52±3.6%)**	57 (12±1.0%)	167 (36±3.6%)**
	Ventricle	KD EphA3	26	643	512 (79±3.3%)	70 (11±1.8%)	61 (10±1.6)
Figure 1D	AVC	GFP	26	638	326 (45±0.6%)	112 (15±1.7%)	200 (40±1.3%)
	AVC	WT EphA3	22	675	329 (48±2.7%)	97 (15±1.6%)	249 (37±2.5%)
	AVC	KD EphA3	26	945	617 (66±4.7%)*	141 (15±2.2%)	187 (19±2.7%)**

* $p < 0.05$, ** $p < 0.01$

Supplemental Table2.

Summary of M-mode echocardiography measurements for 8-week-old mice.

	WT (n=8)	KO (n=8)
Heart Rate (bpm)	703.75±23	573.75±104*
Arrhythmia	0/8	2/8
IVSD (mm)	0.87±0.7	0.75±0.12
LVIDD (mm)	3.07±0.26	3.11±0.32
LVPWD (mm)	0.69±0.06	0.64±0.12
IVSS (mm)	1.60±0.11	1.33±0.16**
LVIDS (mm)	1.50±0.12	1.87±0.3**
LVPWS (mm)	0.96±0.11	0.8±0.09*
FS (%)	51.2±1.6	41.4±4.1*
EF (%)	88.2±1.1	78.3±03.2*

IVSD, interventricular septal thickness at end diastole; LVIDD, left ventricular internal dimension at end diastole; LVPWD left ventricular posterior wall thickness at end diastole; IVSS, interventricular septal thickness at end systole; LVIDS, left ventricular internal dimension at end-systole; LVPWS, left ventricular posterior wall thickness at end systole; FS, fractional shortening; EF, ejection fraction; WT, wild-type; KO, ephrin-A1 knockout animals. *p<0.01; **p<0.05.