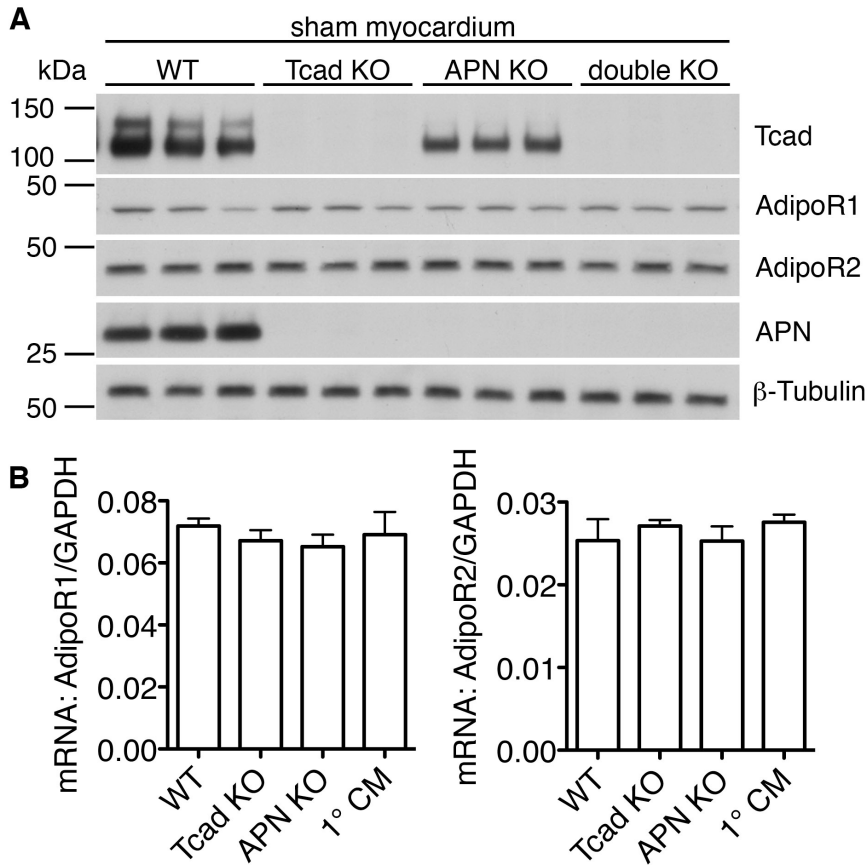
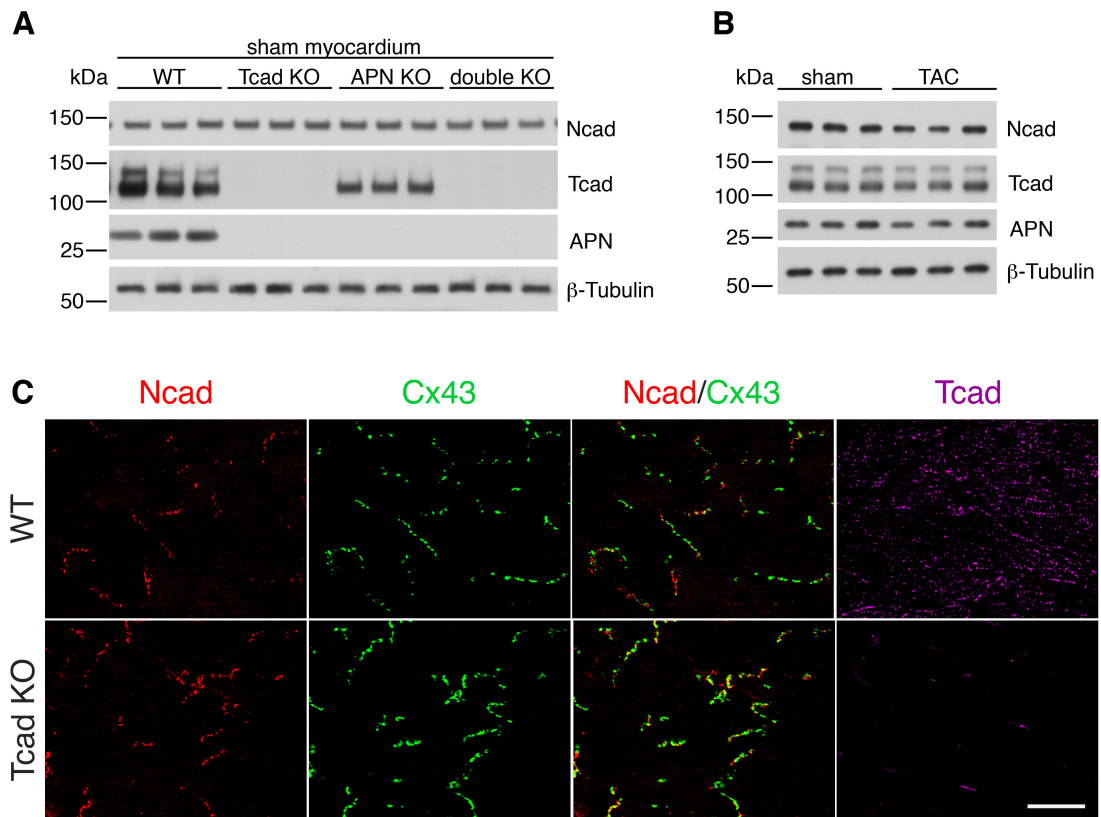


Supplemental Figure 1



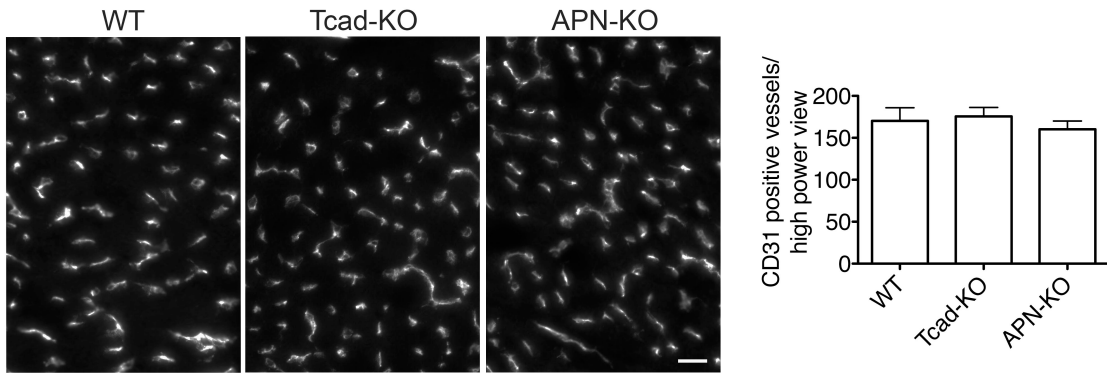
Supplemental Figure 1. AdipoR1/2 in the heart. **(A)** Immunoblot of WT, Tcad-KO, APN-KO, and Tcad/APN dKO myocardial lysates for T-cadherin, AdipoR1 and AdipoR2 protein expression. **(B)** Expression levels of AdipoR1 and AdipoR2 mRNA in hearts of WT, Tcad-KO, APN-KO mice and in isolated WT cardiomyocytes (1° CM).

Supplemental Figure 2



Supplemental Figure 2. N-cadherin is unchanged in Tcad-KO hearts. **(A)** Immunoblot of WT, Tcad-KO, APN-KO, and Tcad/APN dKO sham myocardial lysates for N-cadherin, T-cadherin, and APN protein. **(B)** N-cadherin, T-cadherin, and APN immunoblot of WT myocardial lysates seven days after sham or TAC surgery. **(C)** Immunostaining of WT and Tcad-KO heart sections using N-cadherin, connexin 43, and T-cadherin antibodies. Bar, 10 μ m.

Supplemental Figure 3



Supplemental Figure 3. Vascular density after 7 days of TAC. Representative images from the interventricular septum of WT, Tcad-KO and APN-KO hearts stained with CD31 antibody. Bar, 5 μ m. Quantification shows no difference between genotypes.

Supplemental Table 1

Body weight and echocardiographic measurements in WT, Tcad-KO, APN-KO mice before and 7 days after TAC surgery.

	BW (g)	HR (bpm)	IVSd (mm)	IVSs (mm)	LVIDd (mm)	LVIDs (mm)	LVPWd (mm)	LVPWs (mm)	FS (%)	EDD/PWD	LVM/BW (%)
WT cntl n=10	28.5±1	509±24	0.62±0.02	1.08±0.02	3.76±0.02	2.33±0.08	0.69±0.03	1.1±0.03	38.2±1	5.53±0.21	0.29±0.02
Tcad KO cntl n=12	26.2±0.7	537±21	0.66±0.02	1.14±0.04	3.58±0.08	2.2±0.11	0.72±0.03	1.14±0.04	38.8±1.8	5.04±0.22	0.31±0.02
APN-KO cntl n=6	27.6±0.9	515±31	0.72±0.05	1.18±0.08	3.75±0.12	2.37±0.16	0.74±0.03	1.14±0.08	37.1±2.7	5±0.28	0.31±0.04
WT TAC n=10	28±1	474±21	0.79±0.03 ***	1.19±0.04	3.94±0.09	2.7±0.16	0.81±0.04 *	1.12±0.05	31.8±3	5.14±0.23	0.39±0.02 *
Tcad-KO TAC n=12	26.5±1	521±39	0.82±0.03 ***	1.35±0.05 ** †	3.68±0.07	2.36±0.07	0.92±0.05 *** †	1.26±0.03	35.9±1.6	4.37±0.19 †	0.47±0.02 ***
APN-KO TAC n=6	28±0.9	526±33	1.0±0.05 *** †††	1.5±0.1 ** †††	4.1±0.2	2.7±0.27	0.96±0.03 ** †	1.34±0.04 ††	35.1±4.3	4.3±0.13 †	0.52±0.03 *** ††

* $P<0.05$; ** $P<0.01$; *** $P<0.001$ vs. control (cntl = before TAC)

† $P<0.05$; †† $P<0.01$; ††† $P<0.001$ vs. WT TAC

values are mean ± s.e.m

Supplemental Table 2

Serum APN levels in adGFP or adAPN treated APN null or T-cad/APN dKO mice 10 days after injection.

	cntl	adGFP	adAPN
WT	5.6±0.05 (6)	--	--
T-cad KO	19.4±0.82 (4)	--	--
APN KO	n.d.	n.d.	11.6±0.59 (9)
T-cad/APN KO	n.d.	n.d.	11.5±0.44 (11)

All values are APN in µg/mL. Results are presented as mean ± s.d.; n in parentheses

Supplemental Table 3

Body weight and echocardiographic measurements in WT, Tcad-KO, APN-KO mice 28 days after TAC surgery.

	BW (g)	HR (bpm)	IVSd (mm)	IVSs (mm)	LVIDd (mm)	LVIDs (mm)	LVPWd (mm)	LVPWs (mm)	FS (%)	EDD/PWD	LVM/BW (%)
WT TAC n=4	29.1±0.6	532±35	0.79±0.08	1.05±0.11	4.09±0.16	3.13±0.12	0.78±0.1	1.06±0.1	24.4±0.9	5.52±0.69	0.41±0.06
Tcad-KO TAC n=4	28.9±1	627±38	1.02±0.15	1.36±0.14	4.97±0.19 *	4.09±0.27 *	0.87±0.06	1.14±0.06	16.1±1.8 *	5.78±0.32	0.87±0.09 *
APN-KO TAC n=4	25.7±1.1	551±22	0.93±0.13	1.38±0.21	4.91±0.16 *	4.14±0.48	1.04±0.15	1.25±0.14	16.21±2 *	5.72±1.3	0.89±0.12 *

*P<0.05 vs. WT
values are mean ± s.e.m