

**Supplementary Table 3.** Microarray data showing 146 differentially expressed genes (90 were down-regulated and 56 were up-regulated) in *Acp1*<sup>-/-</sup> sham hearts versus *Acp1*<sup>+/+</sup> sham hearts (*n* = 2). Only genes expression with fold changes  $\geq 1.5$  (up-regulated) or  $\leq -1.5$  (down-regulated) and p-value  $< 0.05$  were considered statistically significant.

RefSeq Transcript ID	Gene Symbol	p-value (- /- sham vs. +/+ sham)	Fold-change (- /- sham vs. +/+ sham)
NM_021282	Cyp2e1	0.0492704	-3.08077
NM_011331	Ccl12	0.00911971	-2.70749
NM_013692	Klf10	0.0483192	-1.98939
NM_173753	Fnip1	0.00300355	-1.95621
---	---	0.0174537	-1.88829
---	BB144871	0.0383273	-1.86071
NM_001163628	Lym5	0.00785658	-1.84841
NM_027534	Kdsr	0.000942838	-1.84116
NM_010578	Itgb1	0.00547123	-1.79231
NM_008969	Ptgs1	0.0201486	-1.77447
NM_008966	Ptgfr	0.00374265	-1.70366
NM_013843	Zfp53	0.00772355	-1.69091

---	BB182297	0.00650441	-1.68691
NM_130860	Cdk9	0.00461476	-1.67835
---	D030020J04Rik	0.022826	-1.67337
---	AI616248	0.00470791	-1.66804
NM_001040669	Gm10058	0.00424226	-1.66753
NM_001113527	lsg20	0.0322474	-1.66051
NM_145570	Fam176a	0.00355675	-1.66039
NR_027388	1700096K18Rik	0.00343505	-1.65825
NM_001163791	Orc6	0.0160189	-1.64414
NM_175499	Slitrk6	0.0175983	-1.64281
NM_026125	Fam132a	0.0244489	-1.64085
NM_001101510	Susd5	0.00128321	-1.63962
---	---	0.0440854	-1.63931
---	---	0.0167805	-1.6385
---	---	0.0111401	-1.63692
NM_001001130	Zfp273	0.0388213	-1.63373
NM_001033300	Gmps	0.0183971	-1.62129
---	---	0.0227572	-1.61882

NM_028443	Fam101a	0.000939414	-1.61648
---	BC026600	0.0462802	-1.61043
NM_001177795	Rgs20	0.0384901	-1.6097
NM_025695	Smc6	0.0205859	-1.60862
NM_001033441	Alg10b	0.000504174	-1.60645
NM_001168392	Ramp1	0.0238384	-1.60202
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NM_001024135	Kbtbd7	0.0133242	-1.59863
NM_025637	Rwdd3	0.00865255	-1.59644
NM_027326	Mllt3	0.0191068	-1.59633
NM_010170	F2r12	0.00315146	-1.59615
NM_023266	Zfp120	0.010077	-1.59484
XM_003085092	LOC100503807	0.0422169	-1.5921
NM_001004066	Zfp386	0.017371	-1.58654
NM_009767	Chic1	0.0420266	-1.58564
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NM_001185002	Rhox13	0.0322873	-1.58025

NM_020283	B3galt1	0.0337955	-1.57937
NM_011044	Pck1	0.014042	-1.57868
NM_021284	Kras	0.002428	-1.57658
NM_021495	Pvr13	0.00205013	-1.57449
NM_011158	Prkar2b	0.00818178	-1.5693
NM_009250	Serpini1	0.0492005	-1.56572
NM_025959	Psmc6	0.0100122	-1.56484
NM_199009	Fam160a2	0.0210779	-1.5618
NM_144902	Slc35a3	0.0271052	-1.56089
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NM_178753	Spin4	0.0214985	-1.55951
NM_010419	Hes5	0.0423693	-1.55725
---	2310076G05Rik	2.23E-06	-1.55494
NM_178642	Ano1	0.00400708	-1.55471
NM_001039154	Cdh8	0.00215667	-1.55234
NM_029823	2900062L11Rik	0.0186702	-1.54736
NM_175480	Zfp612	0.0326323	-1.54684
NM_008339	Cd79b	0.030667	-1.54522

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NM_001164411	Cnot4	0.0105855	-1.54452
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NR_015524	4932415G12Rik	0.0333504	-1.54394
NM_172393	Aim1	0.000530088	-1.54372
NM_001081477	Brwd3	0.035336	-1.5373
NM_052994	Spock2	0.030209	-1.53264
NM_001159717	2-Sep	0.0144684	-1.53175
NM_030732	Tbl1xr1	0.0165542	-1.53058
---	---	0.0145219	-1.52997
NM_028754	0610037L13Rik	0.00239059	-1.52398
NM_001163311	Srr	0.00288294	-1.51916
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NM_001195031	Pag1	0.00290914	-1.51579
NM_001017427	Rasef	0.00342879	-1.51558
---	---	0.0157119	-1.51435
NM_028608	Glipr1	0.0185007	-1.51364
NM_146241	Trhde	0.0184482	-1.51321

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NM_011075	Abcb1b	0.0182047	-1.5091
NM_009531	Xpc	0.0129345	-1.50822
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NM_199062	Zfp781	0.0290842	-1.50578
NR_033608	1700084J12Rik	0.0250257	-1.50022
NM_026004	Nt5c3	0.026226	1.50026
NM_010207	Fgfr2	0.0154401	1.50167
---	1110003F02Rik	0.0368397	1.5055
NM_175260	Myh10	0.022407	1.50633
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NM_001039482	Klh20	0.00907836	1.50742
NM_009181	St8sia2	0.00325648	1.50907
NM_001109657	Gas7	0.0171729	1.50945
---	Tcrg-V1	0.0351432	1.50997
NM_172919	Zfp846	0.00113518	1.5107
NM_133913	Chpf2	0.000351411	1.51149
NM_010288	Gja1	0.0381463	1.51319

NM_021275	Kcna4	0.000145535	1.5215
NM_029465	Clec4g	0.00520004	1.52449
NM_001025612	Snx22	0.00088512	1.52512
---	---	0.00292912	1.52534
---	---	0.0293079	1.52586
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NM_207215	Mycbp2	0.0422143	1.53153
NM_001136060	Dpp6	0.0313216	1.53308
XR_105162	D830044I16Rik	0.0147442	1.53492
NM_028009	Rpusd1	0.0161881	1.54811
NM_028091	Osgepl1	0.0219372	1.54867
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NM_028041	Ddx54	0.00286047	1.54894
NM_001110227	Kcnj13	0.0386405	1.55149
NM_001077507	Gnas	0.0031302	1.55261
NM_001164561	Exosc1	0.035596	1.55457
NM_031869	Prkab1	0.0235665	1.55801
NM_020043	Igdcc4	0.00420856	1.56093

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NM_011025	Oxt	0.000554551	1.56807
NM_001011733	Olfcr288	7.03E-06	1.57264
NM_013538	Cdca3	0.0139498	1.57474
NR_015504	2410018L13Rik	0.00628238	1.57773
NM_016691	Clcn5	0.0317541	1.5875
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NM_198654	Nsl1	0.00298953	1.59223
NM_016709	Auh	0.00970386	1.59235
---	C79946	0.00085651	1.59667
NM_001167967	Ankrd10	0.0292284	1.59796
NM_001033355	Zfp568	0.0335257	1.60327
NM_008919	Ppyr1	0.00222989	1.60509
NM_001110824	Foxp4	0.0148134	1.62002
---	---	0.00448799	1.62124
NM_011484	Stam	0.0120569	1.62416
---	---	0.0350188	1.62794
NM_001038010	Kat2a	0.000116937	1.64682



NM_020260	Arhgap31	0.000894779	1.6625
NM_007930	Enc1	0.0350976	1.66911
---	B930053N05Rik	0.0310161	1.69122
NM_001162906	2410089E03Rik	0.00286053	1.69711
NM_011779	Coro1c	0.0303127	1.71094
NR_033506	Gm3893	0.00314355	1.72489
---	C78513	0.00608809	1.76039
NM_001100591	Rc3h2	0.0266002	2.07195