

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1	Feature ID	Fold Change: FSH + Ad- FOXO1(A3)/ FSH + Ad-E RPKM	FSH + Ad-E: Unique gene reads	FSH + Ad-E: RPKM	FSH + Ad- FOXO1(A3) : Unique gene reads	FSH +Ad- FOXO1 (A3): RPKM	
2	AABR07006049.1	∞	665	0	798	0.09	Genes up-regulated by Ad FOXO1(A3)
3	AABR07013701.1	∞	5	0	65	0.38	
4	AABR07014218.1	∞	479	0	588	0.49	
5	AABR07041724.2	∞	10	0	23	2.2	
6	AABR07070046.1	∞	47	0	89	0.57	
7	Agt	∞	15	0	27	0.84	
8	Arhgap15	∞	11	0	24	0.16	
9	C1qtnf7	∞	4	0	39	0.57	
10	Ccdc37	∞	9	0	28	0.66	
11	Cdh23	∞	35	0	79	0.03	
12	Dcdc2	∞	169	0	164	0.16	
13	Dgki	∞	11	0	23	0.07	
14	Fam71e1	∞	11	0	22	0.87	
15	Fgf14	∞, >2.18	3	0	40	2.18	
16	Foxn1	∞	41	0	33	0.24	
17	Ghrl	∞	16	0	27	1.08	
18	Hcn1	∞	12	0	26	0.49	
19	Hormad2	∞	22	0	32	0.13	
20	Hs3st5	∞	14	0	84	1.07	
21	Htra4	∞	3	0	32	1.8	
22	Ica1l	∞	9	0	21	0.16	
23	Ii12rb2	∞	27	0	35	0.51	
24	Lekr1	∞	30	0	28	0.32	
25	LOC100361645	∞	28	0	31	0.31	
26	LOC100911679	∞	45	0	76	0.39	
27	LOC361914	∞	30	0	38	0.31	
28	LOC498231	∞	17	0	22	1.18	
29	LOC499643	∞	24	0	29	0.12	
30	LOC500990	∞	32	0	36	0.16	
31	LOC691141	∞	18	0	34	0.42	
32	LOC691162	∞	21	0	35	0.27	
33	Lsamp	∞	19	0	25	0.7	
34	Ltbp2	∞	5	0	31	1.01	
35	Malrd1	∞	13	0	24	0.1	
36	Mdga2	∞	19	0	28	0.09	
37	Musk	∞	13	0	35	0.76	
38	Nexn	∞	6	0	58	2.92	
39	Ntn1	∞	9	0	28	0.73	
40	Poln	∞	16	0	22	0.1	
41	Pstpip2	∞	18	0	25	0.17	
42	RGD1563323	∞	26	0	43	0.19	
43	Rims1	∞	20	0	22	0.09	
44	Rtn1	∞	6	0	20	0.5	
45	Sla2	∞	85	0	106	0.19	
46	Sntg2	∞	9	0	22	0.63	
47	Sytl3	∞	18	0	41	0.12	
48	Tmem232	∞	69	0	110	0.11	

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	A	B	C	D	E	F	G
49	Tmem255a	∞	48	0	70	0.16	Genes used for Pathway Studio Analysis
50	Meox2	29.9	6	0.15	75	4.5	
51	Trpc4	24.67	6	0.12	56	2.86	
52	Serpib1a	22.43	1	0.29	30	6.49	
53	Cnn1	14.95	1	0.24	20	3.61	
54	Bcl2	14.2	19	0.31	48	4.36	
55	LOC100910373	14.2	1	0.14	6	2.04	
56	Ewsr1	12.26	0	4.29	4	52.56	
57	Rragd	11.96	1	0.25	27	3	
58	SNORD88_3	11.96	1	4.02	16	48.12	
59	Apba1	11.21	8	0.1	46	1.1	
60	LOC100359550	11.21	1	1.04	15	11.67	
61	LOC688754	10.47	0	0.43	5	4.48	
62	Lpar1	10.47	4	0.22	39	2.3	
63	LOC100363537	10.47	0	0.5	1	5.26	
64	Aatk	9.72	3	0.07	19	0.67	
65	Cage1	9.72	7	0.13	19	1.23	
66	Rbks	9.72	16	0.26	34	2.49	
67	Shb	9.72	7	0.24	44	2.34	
68	Cd38	8.97	2	0.32	27	2.89	
69	AABR07015505.1	8.97	0	0.57	1	5.13	
70	Cd36	8.97	3	0.04	6	0.37	
71	Lmod1	8.72	15	0.24	71	2.1	
72	Tnfrsf11b	8.28	217	25.47	2465	210.86	
73	LOC100912373	8.22	2	0.42	17	3.45	
74	Edn1	8.12	14	3.65	163	29.6	
75	Vmac	7.85	2	1.4	21	11.02	
76	Rab3b	7.76	18	5.04	212	39.11	
77	S1pr1	7.69	7	0.99	74	7.58	
78	Adamts12	7.51	30	0.84	266	6.33	
79	7SK_354	7.48	1	1.28	10	9.6	
80	Cpne5	7.48	4	0.08	13	0.63	
81	Nalcn	7.48	5	0.07	19	0.51	
82	Spry1	7.48	3	0.44	32	3.26	
83	Rn60_20_0046.8	7.48	1	0.8	9	5.95	
84	RGD1565048	7.23	0	1.82	2	13.15	
85	LOC100363452	7.23	1	1.67	8	12.06	
86	Set	7.1	2	1.59	14	11.3	
87	Icam1	7.1	2	0.27	19	1.95	
88	Rasgrp3	7.1	10	0.16	19	1.13	
89	Vgll3	6.98	65	15.16	568	105.79	
90	Rps2-ps6	6.82	2	14.47	13	98.64	
91	AABR07002564.1	6.73	1	1.27	5	8.55	
92	Hey1	6.73	1	0.39	11	2.59	
93	Tnfsf18	6.73	1	0.17	11	1.17	
94	Zfp709l1	6.73	5	0.24	8	1.63	
95	AABR07055492.1	6.73	3	0.41	21	2.77	
96	Elovl2	6.73	1	0.1	10	0.64	
97	Gadd45b	6.73	2	0.56	19	3.75	
98	Myh11	6.73	14	0.38	73	2.55	
99	Olah	6.73	1	0.23	15	1.54	
100	Pth2r	6.73	5	0.18	15	1.23	

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	A	B	C	D	E	F	G
101	Sh3bgrl2	6.73	48	1	86	6.71	
102	Glis3	6.73	15	0.13	64	0.87	
103	Ctgf	6.7	463	61.95	4151	415.12	
104	Cald1	6.57	658	46.55	6023	305.61	
105	Cemip	6.53	194	9.14	1707	59.66	
106	Akap5	6.35	8	1.07	70	6.82	
107	Tgfb3	6.28	5	0.69	45	4.34	
108	Car3	6.23	7	1.37	51	8.53	
109	Fam169b	6.1	20	1.56	141	9.54	
110	Gabra4	6.09	9	0.57	80	3.49	
111	Agtr2	6.07	80	9.71	637	58.92	
112	Serping1	6.06	12	1.92	81	11.61	
113	Akr1c12	5.98	1	0.29	7	1.75	
114	Cebpzoz	5.98	1	1.49	4	8.91	
115	Chtop	5.98	0	0.45	0	2.7	
116	Fgd5	5.98	6	0.06	12	0.35	
117	Hmga1	5.98	3	2.23	16	13.37	
118	Ikzf2	5.98	32	0.17	56	0.99	
119	LOC100911319_2	5.98	0	0.25	5	1.49	
120	Spats2l	5.98	21	0.84	74	5.02	
121	Svip	5.98	2	0.31	8	1.84	
122	Tlr6	5.98	3	0.05	6	0.3	
123	Fam101b	5.98	3	0.53	16	3.18	
124	LOC100911837	5.98	0	0.08	0	0.46	
125	Zfp483	5.98	1	0.16	9	0.98	
126	Megf10	5.86	27	0.86	168	5.01	
127	Reln	5.61	143	3.23	946	18.13	
128	AABR07054593.1	5.61	3	0.39	18	2.19	
129	Maff	5.61	5	1.12	47	6.28	
130	Stmn4	5.61	6	0.51	29	2.87	
131	Rassf5	5.61	9	0.19	30	1.07	
132	Sptbn2	5.61	7	0.09	28	0.5	
133	Timm8a1_1	5.61	2	2.65	11	14.87	
134	Thbd	5.51	8	0.79	59	4.37	
135	LOC100363469	5.45	2	10.88	20	59.25	
136	Plcx3	5.42	15	0.77	68	4.17	
137	Adora2b	5.23	9	0.2	12	1.02	
138	Cdkn2b	5.23	2	0.06	9	0.34	
139	Nek3	5.23	13	0.43	37	2.23	
140	Pglyrp1	5.23	9	0.43	17	2.23	
141	Rn60_X_0711.1	5.23	1	0.57	7	2.97	
142	Rps20	5.23	1	1.01	0	5.31	
143	Spink8	5.23	3	0.41	20	2.17	
144	AABR07017145.1	5.23	9	0.18	17	0.93	
145	AABR07041140.1	5.23	1	0.28	5	1.48	
146	AABR07058656.1	5.23	4	0.38	8	1.97	
147	Ccsap	5.23	3	0.23	8	1.23	
148	Cntn3	5.23	10	0.09	15	0.46	
149	Hsd11b1	5.23	3	0.16	16	0.84	
150	Itga2b	5.23	7	0.11	12	0.57	
151	Kcng3	5.23	8	0.23	16	1.19	
152	Mpp7	5.23	4	0.16	19	0.86	
153	RGD1307461	5.23	2	0.12	8	0.63	
154	RGD1308601	5.23	1	0.07	5	0.38	

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	A	B	C	D	E	F	G
155	Rgs6	5.23	21	0.06	46	0.33	
156	Scin	5.23	3	0.17	9	0.88	
157	Sfrp2	5.23	1	0.15	7	0.81	
158	Slco2a1	5.23	1	0.09	8	0.47	
159	Tmem35	5.23	3	0.19	8	0.97	
160	Tnfaip8	5.23	6	0.46	27	2.39	
161	Wnt16	5.23	1	0.22	8	1.14	
162	LOC100910163	5.23	3	0.84	16	4.4	
163	Otub2	5.23	3	0.13	7	0.68	
164	Nupr1_2	5.22	0	24.82	2	129.5	
165	ENSRNOG000000050	4.98	38	0.82	112	4.07	
166	Dact1	4.98	3	0.44	24	2.21	
167	ENSRNOG000000053	4.98	5	0.32	26	1.6	
168	Sgms2	4.98	6	0.57	28	2.86	
169	Arhgap24	4.86	21	0.49	66	2.4	
170	Exosc3	4.86	2	0.84	13	4.08	
171	AC118147.1	4.86	0	1.32	0	6.43	
172	Spp1	4.85	132	31.46	869	152.54	
173	Gprin3	4.78	5	0.68	32	3.27	
174	Tpm2	4.73	6	0.73	26	3.45	
175	Eda	4.73	23	0.3	55	1.41	
176	Runx1t1	4.65	19	0.5	94	2.34	
177	Brms1_1	4.64	0	2.87	6	13.32	
178	Anxa3	4.61	9	0.56	44	2.56	
179	Arid5a	4.56	11	1.34	71	6.13	
180	Spag1	4.54	39	1.29	174	5.86	
181	Fam198b	4.51	35	2.51	206	11.33	
182	Pamr1	4.5	242	26.92	1543	121.05	
183	AABR07010144.1	4.49	0	0.08	2	0.37	
184	AABR07054265.1	4.49	3	3.77	11	16.92	
185	AABR07064980.1	4.49	0	1.14	0	5.11	
186	AC110709.1	4.49	0	1.81	1	8.14	
187	Bmp8a	4.49	3	0.19	7	0.85	
188	C6	4.49	6	0.12	8	0.54	
189	Erg	4.49	5	0.3	21	1.35	
190	Faim2	4.49	2	0.11	4	0.48	
191	Hip1r	4.49	18	1.08	85	4.86	
192	Map3k6	4.49	1	0.08	6	0.37	
193	Pak2_2	4.49	0	0.37	2	1.65	
194	Ppp2r2b	4.49	24	0.18	23	0.83	
195	Radil	4.49	8	0.1	8	0.44	
196	RGD1560687	4.49	0	0.66	2	2.94	
197	Sept4	4.49	16	1.2	83	5.39	
198	SNORD113_26	4.49	0	3.81	0	17.1	
199	Vasn	4.49	0	0.13	1	0.59	
200	AABR07044080.2	4.49	6	1.55	17	6.94	
201	Atf7ip2	4.49	4	0.31	12	1.37	
202	Cyp7b1	4.49	13	0.13	12	0.57	
203	Fcgr2b	4.49	10	0.1	14	0.44	
204	Fjx1	4.49	2	0.34	12	1.55	
205	Glb1l2	4.49	2	0.15	7	0.67	
206	Gnb3	4.49	4	0.21	8	0.93	
207	Larp6	4.49	3	0.15	7	0.7	
208	LOC102555453	4.49	0	0.73	0	3.26	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
209	Mreg	4.49	9	0.12	10	0.55	
210	Ogn_2	4.49	0	0.4	0	1.81	
211	Slc4a11	4.49	4	0.36	23	1.6	
212	SNORD24_2	4.49	0	4.83	0	21.66	
213	Timm9	4.49	2	0.81	11	3.62	
214	Trpc1	4.49	5	0.17	16	0.78	
215	Tnc	4.45	27	1.2	154	5.37	
216	Lrrfip1	4.38	43	3.49	271	15.3	
217	Ets1	4.36	44	2.66	229	11.62	
218	Pclo	4.34	46	0.95	256	4.14	
219	F3	4.3	16	3.18	102	13.67	
220	Sytl2_1	4.3	16	5.67	86	24.38	
221	Fam124a	4.28	20	0.98	108	4.21	
222	Rapgef5	4.27	17	0.47	48	2	
223	Fam65b	4.27	18	1.29	81	5.51	
224	Bdnf	4.27	40	1.85	233	7.9	
225	Pdlim3	4.24	60	6.12	315	25.98	
226	Cdh5	4.24	6	0.27	19	1.14	
227	Tnnc1	4.24	3	1.32	17	5.58	
228	Scn9a	4.21	15	0.43	65	1.8	
229	Shroom3	4.19	22	0.47	74	1.95	
230	Htr2a	4.15	62	2.27	261	9.44	
231	Tmem144	4.11	5	0.25	25	1.04	
232	B3gnt5	4.11	2	0.17	12	0.71	
233	Bspry	4.11	4	0.33	13	1.36	
234	Clec14a	4.11	2	0.23	11	0.95	
235	Dtx4	4.11	5	0.37	13	1.51	
236	ENSRNOG0000006	4.11	4	0.2	13	0.83	
237	Fam20a	4.11	7	0.27	25	1.12	
238	Fgf13	4.11	10	0.25	31	1.03	
239	Icoslg	4.11	8	0.26	23	1.07	
240	MGC105567	4.11	2	0.34	13	1.4	
241	Olr1433	4.11	2	0.74	12	3.03	
242	Pbld1	4.11	9	1.07	40	4.41	
243	RGD1560207	4.11	4	0.26	16	1.05	
244	Tmem160	4.11	2	0.88	12	3.64	
245	Tppp3	4.11	0	0.74	3	3.05	
246	Zfp365	4.11	6	0.43	38	1.77	
247	Pdgfrb	4.04	6	0.32	32	1.28	
248	Acta2	4	562	146.29	3038	584.58	
249	AC120310.1	3.99	0	0.54	0	2.14	
250	Prune2	3.99	11	1.12	39	4.48	
251	Spryd7	3.99	6	0.79	22	3.16	
252	Tlr4	3.93	5	0.43	24	1.7	
253	Phactr2	3.89	19	0.91	48	3.56	
254	Ankrd1	3.86	6	1.23	36	4.74	
255	Lrp4	3.83	32	1.11	168	4.25	
256	Stard13	3.82	65	0.58	157	2.22	
257	Fn1	3.75	1926	82.23	9650	308.37	
258	AABR07038349.1	3.74	2	0.33	5	1.25	
259	Ankh	3.74	32	2.95	143	11.02	
260	Col20a1	3.74	15	0.08	19	0.31	
261	Rnf180	3.74	14	0.61	25	2.28	
262	SNORD36_2	3.74	0	8.83	0	33.01	

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	A	B	C	D	E	F	G
263	AABR07037356.1	3.74	2	0.31	4	1.16	
264	AABR07060862.1	3.74	1	0.11	5	0.41	
265	AABR07062268.1	3.74	0	0.75	0	2.82	
266	AC110387.1	3.74	2	4.71	4	17.62	
267	Brinp2	3.74	2	0.09	8	0.33	
268	Enox1	3.74	24	0.62	63	2.33	
269	Fancf	3.74	1	0.36	5	1.33	
270	Gls2	3.74	4	0.13	5	0.49	
271	Gpr75	3.74	1	0.14	5	0.52	
272	Igf2bp3	3.74	5	0.17	13	0.63	
273	Ikbke	3.74	8	0.22	18	0.84	
274	Il17d	3.74	3	0.58	20	2.16	
275	Klhdc9	3.74	2	0.4	11	1.49	
276	Lmntd2	3.74	1	0.12	4	0.47	
277	LOC100125368	3.74	0	0.24	0	0.9	
278	LOC288978	3.74	9	0.33	19	1.23	
279	Map3k8	3.74	2	0.13	9	0.47	
280	Map7d3	3.74	7	0.11	7	0.4	
281	Nuak2	3.74	1	0.13	6	0.47	
282	Paqr5	3.74	4	0.1	13	0.37	
283	Rgcc	3.74	3	0.41	7	1.52	
284	SCARNA2_1	3.74	1	0.87	5	3.25	
285	Slc6a20	3.74	5	0.12	12	0.45	
286	Syt14	3.74	13	0.17	21	0.65	
287	Thbs4	3.74	3	0.22	10	0.84	
288	Zc3hav1l	3.74	3	0.8	16	3	
289	Arhgef37	3.74	8	0.09	22	0.35	
290	Cidea	3.74	3	0.66	6	2.48	
291	Gsta5	3.74	0	0.35	0	1.31	
292	Itgbl1	3.74	16	0.47	46	1.77	
293	Nav3	3.74	18	0.43	77	1.6	
294	Rccd1	3.74	6	0.32	16	1.19	
295	Rgs10	3.74	1	0.43	8	1.61	
296	snoMBII-202_2	3.74	0	4.36	0	16.31	
297	Zfp455	3.74	1	0.12	3	0.45	
298	Tec	3.74	12	0.68	56	2.54	
299	Pdk4	3.68	12	2.76	59	10.15	
300	Penk	3.64	16	3.4	80	12.41	
301	Aspn_2	3.64	6	2.64	24	9.59	
302	Alpk3	3.63	11	0.4	44	1.46	
303	AABR07073045.1	3.61	0	4.66	0	16.85	
304	Klf12	3.61	67	1.4	206	5.08	
305	Popdc2	3.59	23	1.63	90	5.84	
306	Sh3yl1	3.59	24	1.31	64	4.68	
307	Lcp1	3.55	7	0.4	21	1.41	
308	Stxbp6	3.55	43	2.18	170	7.74	
309	Ehd4	3.53	171	16.05	865	56.7	
310	Ccdc80	3.51	12	0.88	49	3.11	
311	AABR07008377.1	3.5	4	14.89	15	52.15	
312	Hpse	3.49	5	0.68	18	2.36	
313	LOC100361913	3.49	0	1.4	0	4.87	
314	Lsp1	3.49	6	0.88	23	3.07	
315	Mgp	3.49	3	1.61	16	5.61	
316	Cav1	3.39	114	15.99	519	54.29	

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	A	B	C	D	E	F	G
317	Cd55	3.39	30	1.99	126	6.74	
318	Dcun1d3	3.36	28	1.97	72	6.62	
319	Dusp4	3.36	5	0.36	18	1.23	
320	Scml2	3.36	13	0.17	14	0.56	
321	Syt9	3.36	5	0.48	14	1.62	
322	AABR07063829.1	3.36	5	1.69	12	5.68	
323	Ccdc175	3.36	8	0.27	14	0.9	
324	Gbp5	3.36	3	0.23	9	0.78	
325	LOC100364191	3.36	0	1.84	2	6.2	
326	Orai2	3.36	3	0.17	15	0.58	
327	Rec114	3.36	7	0.76	10	2.57	
328	Slfn2	3.36	13	1.63	40	5.5	
329	Tbkbp1	3.36	4	0.22	13	0.74	
330	Sult1a1	3.36	10	0.59	13	1.99	
331	Thsd7a	3.35	47	1.69	180	5.65	
332	Klf6	3.34	274	8.13	827	27.15	
333	Tspan2	3.34	30	2.46	152	8.2	
334	Npnt	3.32	92	12.38	443	41.15	
335	Bend7	3.32	33	2.52	125	8.37	
336	Tdrd7	3.3	374	25.91	1761	85.37	
337	Osr2	3.29	7	0.89	25	2.94	
338	Zfp385d	3.29	51	1.04	168	3.44	
339	Pyroxd1	3.26	21	2.24	77	7.32	
340	Fsd1l	3.24	19	0.58	56	1.89	
341	Pigf	3.24	28	1.69	43	5.49	
342	Proca1	3.24	18	0.77	27	2.49	
343	Rhoj	3.24	13	0.41	21	1.31	
344	Gja4	3.24	6	1.37	26	4.43	
345	SNORD123	3.24	3	15.52	13	50.27	
346	Efnb2	3.22	36	2.22	143	7.14	
347	Ghr	3.19	92	3.81	303	12.16	
348	Atp13a3	3.18	12	1.83	29	5.83	
349	Gldc	3.18	7	0.38	29	1.22	
350	Bach2	3.14	36	0.96	165	3.03	
351	Pin4	3.12	11	4.67	25	14.55	
352	Plekhg1	3.08	13	0.47	48	1.46	
353	Dcn	3.08	67	12.64	287	38.96	
354	Zfp36	3.07	9	1.77	38	5.43	
355	Cyr61	3.07	441	79.93	1812	245.18	
356	Il1r1	3.05	21	1.19	67	3.63	
357	AABR07036855.1	3.04	8	4.54	28	13.83	
358	Tgfb2	3.03	342	24.99	1449	75.68	
359	LOC100910881	3.02	0	1.36	2	4.12	
360	Cpe	3.01	120	18.58	514	55.96	
361	LOC100911572_1	3	155	11.23	629	33.67	
362	2900026A02Rik	2.99	9	0.07	14	0.22	
363	AABR07027752.3	2.99	1	0.6	4	1.81	
364	AABR07049961.1	2.99	0	0.21	1	0.63	
365	AABR07050399.2	2.99	0	0.19	2	0.56	
366	AABR07055146.1	2.99	1	0.34	5	1.01	
367	AABR07062344.1	2.99	0	2.87	0	8.59	
368	AC095390.1	2.99	46	0.99	99	2.96	
369	AC136661.1	2.99	0	1.09	0	3.25	
370	Afmid	2.99	11	0.14	10	0.43	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
371	Ankmy1	2.99	8	0.24	18	0.72	
372	Arl4d	2.99	2	0.52	8	1.57	
373	Asb4	2.99	9	0.31	18	0.93	
374	C8g	2.99	16	0.88	22	2.63	
375	Car9	2.99	2	0.18	9	0.52	
376	Cask_1	2.99	0	0.34	0	1.01	
377	Cdh13	2.99	79	1.34	141	4.02	
378	Cebpd	2.99	3	0.95	12	2.85	
379	Cib2	2.99	5	0.26	4	0.77	
380	Cntn4	2.99	10	0.07	12	0.22	
381	Col11a2	2.99	1	0.06	5	0.17	
382	Cxcr4	2.99	1	0.21	4	0.62	
383	Dbf4_2	2.99	0	0.36	4	1.09	
384	Eef1a2	2.99	1	0.18	5	0.54	
385	Epha3	2.99	11	0.06	14	0.18	
386	Fam131a_1	2.99	0	0.1	0	0.3	
387	Gabra5	2.99	5	0.14	8	0.41	
388	Gng11	2.99	0	0.42	0	1.25	
389	Heatr4	2.99	2	0.09	11	0.27	
390	Krt80	2.99	2	0.12	5	0.35	
391	LOC100362814	2.99	18	0.18	49	0.54	
392	LOC100911713	2.99	0	0.95	0	2.84	
393	LOC100911926	2.99	2	0.29	9	0.86	
394	LOC679565	2.99	0	0.24	0	0.72	
395	LOC681193	2.99	0	0.37	0	1.12	
396	Lrrc3b	2.99	1	0.46	4	1.39	
397	Ly6h	2.99	1	0.33	4	1	
398	Mcc	2.99	40	3.13	135	9.35	
399	Mmp28	2.99	5	0.46	18	1.37	
400	Mn1	2.99	5	0.09	5	0.28	
401	Myl6b	2.99	30	1.74	56	5.21	
402	Pde4a	2.99	2	0.14	10	0.43	
403	Prdm1	2.99	3	0.07	7	0.2	
404	Prrt2	2.99	2	0.15	5	0.45	
405	RGD1559441	2.99	6	0.08	10	0.22	
406	RGD1563962	2.99	0	0.2	0	0.59	
407	Rgs22	2.99	7	0.14	20	0.42	
408	Rnf128	2.99	4	0.23	10	0.68	
409	Satb2	2.99	6	0.06	13	0.17	
410	Serpinb2	2.99	2	0.37	9	1.1	
411	Serpinb8	2.99	4	0.26	14	0.78	
412	Serpine1	2.99	5	0.59	22	1.77	
413	Slc1a1	2.99	5	0.1	11	0.29	
414	Slc25a29	2.99	9	0.36	20	1.08	
415	SNORD36_5	2.99	0	8.83	0	26.41	
416	Spata24	2.99	12	0.45	8	1.35	
417	Spef2	2.99	4	0.06	5	0.19	
418	Tmem86b	2.99	1	0.23	4	0.69	
419	Trpc5	2.99	17	0.28	34	0.84	
420	Trpm1	2.99	5	0.07	11	0.22	
421	Zfp423	2.99	11	0.08	12	0.23	
422	Zfp951_1	2.99	0	0.29	0	0.88	
423	AABR07001233.1	2.99	61	0.29	86	0.86	
424	AABR07002247.1	2.99	7	0.24	20	0.71	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
425	AABR07047140.1	2.99	0	1.06	0	3.17	
426	Abhd15	2.99	2	0.12	4	0.35	
427	Actc1	2.99	1	0.24	4	0.73	
428	Ahrr	2.99	20	0.62	48	1.85	
429	Crnk1l_2	2.99	0	0.46	2	1.37	
430	Dcun1d2	2.99	0	0.27	0	0.8	
431	Epb4.1l1	2.99	0	0.11	1	0.33	
432	Fbxo15	2.99	8	0.24	14	0.71	
433	Izumo4	2.99	3	0.53	7	1.58	
434	Klk13	2.99	1	0.35	6	1.04	
435	LOC100360120	2.99	124	1.34	172	4.01	
436	LOC100910255_1	2.99	0	0.07	0	0.2	
437	LOC100910885_2	2.99	2	0.3	2	0.9	
438	Nek10	2.99	26	0.21	53	0.64	
439	Npr1	2.99	1	0.09	4	0.27	
440	Polm	2.99	12	0.45	22	1.34	
441	RGD1560784	2.99	1	0.36	4	1.08	
442	Rgs7bp	2.99	9	0.7	25	2.1	
443	Snai1	2.99	2	0.2	6	0.59	
444	SNORA44_6	2.99	0	2.81	0	8.39	
445	SNORA44_8	2.99	0	5.61	0	16.79	
446	Syndig1	2.99	7	0.17	11	0.5	
447	Trpm6	2.99	3	0.06	6	0.18	
448	Zfp111	2.99	0	0.16	3	0.48	
449	Zfp580	2.99	1	0.7	4	2.09	
450	Grk4	2.99	54	1.03	109	3.07	
451	Lgals8	2.98	34	12.45	125	37.12	
452	Fbxo32	2.96	66	5.58	267	16.52	
453	Pex5	2.95	0	4.75	0	14.03	
454	Cnksr3	2.95	74	4.18	277	12.31	
455	Filip1l	2.94	539	29.73	2474	87.4	
456	Adamts13	2.94	24	0.68	73	2.01	
457	Actn1	2.93	635	49.33	2455	144.48	
458	Gmfb	2.93	18	9.47	52	27.72	
459	Mitf	2.91	127	3.99	441	11.61	
460	Mnat1	2.89	76	10.02	211	28.92	
461	Fnip2	2.88	22	1.07	77	3.08	
462	Ppap2a	2.88	21	1.72	54	4.96	
463	Anpep	2.88	386	35.45	1506	102.2	
464	Pdlim5	2.88	55	7.56	199	21.75	
465	SNORD39	2.88	0	238.32	0	685.29	
466	Lmcd1	2.88	33	5.67	148	16.31	
467	Celf2	2.87	78	5.56	282	15.96	
468	AABR07005618.1	2.87	7	4.99	23	14.31	
469	Xrcc4	2.87	43	1.51	65	4.33	
470	Stx3	2.86	84	7.17	314	20.51	
471	Nov	2.84	1576	232.11	6126	659.44	
472	Scrn1	2.84	14	0.36	35	1.02	
473	BC030336	2.84	14	4.54	40	12.89	
474	RGD1564405	2.84	3	0.9	16	2.55	
475	Vrk2	2.84	29	1.6	55	4.54	
476	Pcgf5	2.83	29	2.89	131	8.19	
477	Lnp	2.82	29	2.14	89	6.05	
478	RGD1561444	2.82	37	1.51	140	4.25	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
479	Tyw3	2.82	30	2.41	56	6.8	
480	Mid1	2.81	42	1.46	163	4.12	
481	Gemin6	2.8	6	1.33	15	3.73	
482	Creb5	2.8	40	0.64	111	1.8	
483	Lims2	2.8	17	1.79	66	5.01	
484	Cited2	2.8	229	42.54	861	119.03	
485	Dock10	2.8	71	1.42	190	3.97	
486	Itih5	2.79	25	5.66	95	15.78	
487	Pcbp3	2.78	32	1.24	64	3.43	
488	AABR07027272.1	2.78	5	1.31	18	3.65	
489	Aass	2.78	10	0.91	29	2.53	
490	Slitrk6	2.78	7	0.6	26	1.66	
491	Trpc3	2.77	39	1.58	150	4.39	
492	AABR07039234.1	2.74	2	0.62	9	1.71	
493	Car5b	2.74	7	0.38	13	1.05	
494	Rtkn2	2.74	13	0.31	21	0.84	
495	AC106663.5	2.74	0	1.71	1	4.68	
496	Rp2	2.74	32	0.69	70	1.89	
497	Sapcd2	2.74	6	0.7	16	1.92	
498	Zfp87	2.74	2	0.67	7	1.84	
499	Peak1	2.74	210	6.56	727	17.95	
500	G6pc_1	2.74	4	7.75	14	21.2	
501	Dock5	2.73	237	10.01	840	27.31	
502	Arid5b	2.72	172	8.82	603	24.03	
503	Kif20b	2.72	21	0.93	54	2.52	
504	Amotl2	2.72	408	28.96	1437	78.74	
505	Mterf	2.72	21	2.65	62	7.21	
506	AC117889.1	2.71	5	1.06	11	2.86	
507	Zfp641	2.71	10	1.39	31	3.78	
508	Pfdn6	2.7	14	12.26	49	33.13	
509	Ndrp1	2.7	29	3.49	112	9.4	
510	Ank3	2.69	17	0.17	42	0.47	
511	Nr6a1	2.69	20	1.37	65	3.7	
512	Mr1	2.69	16	0.6	27	1.62	
513	Rhebl1	2.69	7	1.53	21	4.12	
514	Lox	2.68	1813	122.4	6266	328.52	
515	Bmf	2.68	23	3.3	86	8.83	
516	Cldn1	2.67	9	0.77	29	2.05	
517	SNORD100	2.67	0	33.79	0	90.23	
518	Jmjd7	2.67	13	1.9	29	5.07	
519	Akap12	2.66	33	1.37	104	3.66	
520	Otud1	2.66	9	2.38	32	6.33	
521	Tpm1	2.66	399	35.9	1453	95.38	
522	RT1-CE2	2.66	24	4.47	93	11.87	
523	Adamts5	2.63	549	55.11	2105	145.05	
524	Bean1	2.63	54	12.09	176	31.78	
525	Sept6	2.63	89	7.2	305	18.89	
526	Smagp	2.62	5	0.48	11	1.27	
527	AABR07028795.1	2.62	4	3.22	7	8.42	
528	Kcnb2	2.62	2	0.33	7	0.88	
529	LOC100362583	2.62	0	1.19	2	3.11	
530	LOC100911256	2.62	0	0.11	0	0.29	
531	LOC680200	2.62	12	0.92	27	2.4	
532	Maml2	2.62	61	1.23	189	3.22	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
533	Nfil3	2.62	16	2.59	56	6.77	
534	Nin	2.62	3	1.29	14	3.38	
535	Rn60_9_0975.2	2.62	2	0.88	7	2.31	
536	SNORA44_21	2.62	0	5.61	0	14.69	
537	Zscan29	2.62	12	0.29	26	0.75	
538	Ppp1r14c	2.62	4	0.26	11	0.68	
539	Zfp37	2.62	1	0.41	3	1.06	
540	Zbtb44	2.61	83	7.35	259	19.19	
541	Zyx	2.61	449	60.44	1600	157.46	
542	Egr1	2.61	95	11.22	337	29.23	
543	Stradb	2.6	64	6.78	229	17.62	
544	Ccdc15	2.6	47	3.03	124	7.87	
545	Sema3a	2.6	84	6.52	285	16.94	
546	Fosl2	2.6	119	19.47	418	50.57	
547	Aspn_1	2.59	5	4.04	15	10.47	
548	Rpl13	2.59	9	22.2	30	57.46	
549	Tjp2	2.58	55	2.71	175	7.01	
550	Tmem140	2.58	22	2.91	56	7.5	
551	Cdyl2	2.58	25	1.59	52	4.1	
552	Fign	2.58	41	0.96	96	2.48	
553	Pcdh17	2.58	11	0.7	39	1.8	
554	Diap2	2.58	26	1.54	53	3.96	
555	LOC100911597	2.57	90	63.79	224	164.11	
556	Synj2	2.57	73	3.54	242	9.11	
557	Tfcp2l1	2.57	38	1.57	116	4.04	
558	Plscr4	2.57	148	10.36	511	26.6	
559	Mfap3l	2.57	70	9.97	242	25.59	
560	Xdh	2.57	108	7.38	369	18.95	
561	Itgb8	2.56	15	0.73	39	1.86	
562	Sorbs1	2.56	146	5.55	539	14.22	
563	Rnd3	2.56	309	34.67	1099	88.79	
564	Setdb2	2.55	40	3.71	137	9.46	
565	Pcgf1	2.54	0	1.44	1	3.67	
566	Wipf1	2.53	20	1.73	67	4.39	
567	RGD1565641	2.53	17	11.42	49	28.91	
568	Slc35f1	2.53	18	1.15	52	2.92	
569	AABR07053749.1	2.53	34	15.09	101	38.1	
570	Jade1	2.52	91	4.04	292	10.21	
571	Hyi	2.52	11	2.79	23	7.03	
572	Pdha11l	2.52	3	1.42	12	3.58	
573	Dpysl3	2.52	159	19.22	565	48.41	
574	Map3k9	2.51	13	1.07	42	2.7	
575	Angpt1	2.51	61	5.36	204	13.46	
576	Hspb1	2.51	17	7	57	17.55	
577	Rnd1	2.5	49	9.68	156	24.23	
578	Crim1	2.5	857	59.16	3141	148.03	
579	Csrp1	2.5	85	17.01	307	42.5	
580	AABR07010620.1	2.49	9	1.05	30	2.62	
581	Camkmt	2.49	10	1.07	20	2.66	
582	Hmmr	2.49	14	0.95	24	2.37	
583	LOC100912042	2.49	0	0.94	0	2.34	
584	LOC102553962	2.49	5	0.84	11	2.09	
585	Mybpc3	2.49	4	0.26	10	0.65	
586	SNORD71	2.49	6	25.86	20	64.45	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
587	Ubxn2a	2.49	5	1.4	10	3.48	
588	Zfp583	2.49	4	0.45	11	1.13	
589	Zfp717	2.49	2	0.28	4	0.69	
590	Zfp819	2.49	4	0.51	9	1.27	
591	AABR07054262.2	2.49	3	0.64	10	1.6	
592	Arhgap20	2.49	3	0.15	21	0.38	
593	Irx2	2.49	4	0.76	12	1.9	
594	LOC100909526	2.49	0	0.72	0	1.8	
595	LOC691056	2.49	9	0.51	15	1.28	
596	Mettl18	2.49	3	0.72	10	1.8	
597	Pcdhb20	2.49	3	0.32	8	0.8	
598	Scn7a	2.49	4	0.21	14	0.53	
599	Ntn4	2.47	125	14.06	413	34.8	
600	Ckap2l	2.47	15	1.48	38	3.65	
601	Gm4944	2.47	15	1.09	46	2.68	
602	Nap1l3	2.47	10	1.29	33	3.19	
603	Hbegf	2.46	57	8.48	195	20.9	
604	Ahnak	2.46	1061	21.41	3519	52.72	
605	Cep55	2.46	9	1.02	24	2.5	
606	Mrap2	2.46	54	4.54	131	11.16	
607	Osmr	2.46	11	0.88	32	2.15	
608	Phospho1	2.46	7	1.27	26	3.11	
609	Aimp1	2.45	43	11.62	129	28.47	
610	Lrrfip2	2.45	64	3.6	151	8.82	
611	LOC100911319_1	2.45	81	11.56	289	28.31	
612	Nacad	2.44	25	1.58	72	3.85	
613	Vcl	2.44	668	40.62	2147	99.04	
614	Dse	2.44	26	1.9	93	4.63	
615	Samd4a	2.44	86	3.08	340	7.49	
616	Fos	2.43	13	2.73	42	6.64	
617	Lurap1l	2.43	30	2.53	40	6.14	
618	Rnls	2.43	52	0.81	74	1.96	
619	Tpmt	2.43	8	1.18	17	2.86	
620	AABR07059632.3	2.43	1	0.33	2	0.81	
621	Klhl40	2.43	9	1.28	27	3.11	
622	Nat2	2.43	8	1.05	13	2.54	
623	Pabpc4l	2.43	4	0.99	13	2.41	
624	MyI9	2.43	137	44.93	453	109.11	
625	Fam50a_1	2.42	0	7.18	1	17.34	
626	Pet100	2.42	7	3.93	25	9.5	
627	Eml5	2.41	41	0.5	98	1.2	
628	Rpl26-ps2	2.41	1	7.44	3	17.92	
629	Kiz	2.41	42	1.39	76	3.34	
630	Nenf	2.41	28	12.73	81	30.63	
631	Clic4	2.4	172	44.87	539	107.9	
632	Vps37d	2.39	10	1.16	24	2.77	
633	Stbd1	2.39	5	0.94	16	2.24	
634	Per2	2.39	28	1.31	86	3.14	
635	Mal2	2.38	10	1.43	33	3.41	
636	Specc1	2.38	135	4.04	403	9.61	
637	Fam117a	2.37	37	2.41	107	5.7	
638	Tes	2.37	240	35.56	813	84.12	
639	Six4	2.36	49	2.67	149	6.3	
640	Adgrv1	2.36	33	0.2	65	0.48	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
641	RGD1309730	2.36	30	4.49	89	10.58	
642	Txnrd3	2.35	9	0.9	25	2.12	
643	Clip3_2	2.35	4	0.71	9	1.67	
644	Dfna5	2.35	16	1.64	50	3.85	
645	Kif5c	2.35	30	1.15	85	2.71	
646	Ptpdc1	2.35	13	0.75	37	1.77	
647	snosnR60_Z15_3	2.35	0	31.29	1	73.52	
648	Tagln	2.35	588	175.26	1944	411.43	
649	Gadd45a	2.35	38	10.5	119	24.65	
650	Map1b	2.35	1856	51.2	5954	120.15	
651	Fam172a	2.34	76	4.89	158	11.46	
652	Fam129a	2.34	107	8.5	358	19.88	
653	Cpeb2	2.34	29	1.09	69	2.55	
654	SNORD89	2.34	8	25.19	25	58.85	
655	Cutc	2.34	25	2.22	51	5.2	
656	Vps13b	2.34	18	2.63	63	6.15	
657	Dstn	2.33	411	93.42	1216	217.87	
658	Anxa1	2.33	355	78.04	1142	181.93	
659	Gpatch1	2.33	34	2	91	4.65	
660	Mob3a	2.33	38	3.96	109	9.2	
661	Cnn2	2.32	69	41.14	184	95.56	
662	Gabre	2.32	29	1.53	104	3.56	
663	Pxdc1	2.32	40	5.88	167	13.63	
664	Junb	2.32	20	4.06	61	9.41	
665	Slc35d2	2.32	40	1.82	60	4.23	
666	Nr0b1	2.31	81	16.27	254	37.56	
667	Hivep1	2.3	50	3.09	164	7.1	
668	Col4a4	2.3	829	25.54	2597	58.68	
669	Slc43a2	2.3	37	2.26	107	5.18	
670	Gpr176	2.29	160	9.66	608	22.09	
671	Rab30	2.28	40	4.07	118	9.29	
672	Tpm4	2.28	335	106.11	1018	242.36	
673	Rn60_X_0641.1	2.28	42	8.03	127	18.29	
674	Ston1	2.28	73	7.63	241	17.38	
675	Tbc1d23	2.28	217	12.77	663	29.08	
676	Dkk3	2.28	263	18.36	834	41.77	
677	Spata13	2.27	239	10.12	681	23.02	
678	Cnst	2.26	57	5.52	192	12.48	
679	Rras2	2.26	55	7.33	175	16.57	
680	Ninl	2.26	325	16.28	851	36.77	
681	Pik3ip1	2.25	187	21.74	556	48.87	
682	AABR07001497.1	2.24	4	1.37	8	3.07	
683	AABR07008016.1	2.24	5	3.18	18	7.12	
684	AABR07015006.1	2.24	2	1.14	4	2.55	
685	AABR07021220.1	2.24	0	0.28	0	0.64	
686	AABR07024593.2	2.24	1	2.85	3	6.39	
687	AABR07044049.1	2.24	22	0.12	16	0.27	
688	AABR07048280.1	2.24	0	0.62	0	1.38	
689	AABR07061385.2	2.24	1	0.97	3	2.18	
690	AABR07071813.1	2.24	3	0.49	6	1.11	
691	Aadat	2.24	7	0.7	13	1.57	
692	AC103090.1	2.24	1	2.62	3	5.88	
693	AC124205.1	2.24	0	0.34	0	0.77	
694	AC141136.1	2.24	3	0.29	4	0.64	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
695	Adam7	2.24	11	0.1	19	0.23	
696	Afap111	2.24	2	0.11	5	0.24	
697	AY172581.23	2.24	1	5.32	3	11.94	
698	Cenpw	2.24	2	0.45	7	1.01	
699	Cilp	2.24	2	0.09	3	0.2	
700	Clic2	2.24	5	0.28	6	0.62	
701	Cmya5	2.24	5	0.03	6	0.07	
702	Dazl	2.24	1	0.13	3	0.28	
703	Emc9	2.24	1	0.1	5	0.24	
704	Esr1	2.24	18	0.06	20	0.14	
705	Etv4	2.24	4	0.6	13	1.34	
706	Fam109a	2.24	1	0.51	3	1.15	
707	Fam81a	2.24	7	0.28	12	0.64	
708	Fgfbp3	2.24	2	0.42	6	0.94	
709	Ggn	2.24	9	0.6	15	1.35	
710	Gtpbp8	2.24	29	1.81	44	4.06	
711	Gulp1	2.24	91	3.38	202	7.59	
712	Hlf	2.24	4	0.41	5	0.91	
713	Hpd1	2.24	1	0.23	3	0.51	
714	Inpp5j	2.24	2	0.11	3	0.24	
715	Kcnv2	2.24	2	0.07	4	0.16	
716	L3hypdh	2.24	3	0.39	7	0.88	
717	LOC100359687	2.24	0	1.69	0	3.79	
718	LOC100363068_2	2.24	0	1.63	0	3.66	
719	LOC100911305	2.24	0	0.62	0	1.38	
720	LOC100911938	2.24	0	0.19	0	0.42	
721	LOC102555249	2.24	2	2.25	6	5.04	
722	LOC102556119	2.24	1	0.14	3	0.31	
723	LOC501033	2.24	1	0.12	3	0.28	
724	LOC682489	2.24	11	0.58	14	1.3	
725	LOC686013	2.24	8	0.25	14	0.56	
726	LOC691153	2.24	1	0.24	3	0.53	
727	Lyplal1	2.24	22	3.56	52	7.97	
728	Mb21d1	2.24	4	0.71	13	1.59	
729	Mkrn2os	2.24	6	0.12	14	0.28	
730	Ngf	2.24	2	0.16	4	0.37	
731	Nlrp3	2.24	2	0.17	8	0.39	
732	Pinx1	2.24	38	3.05	78	6.85	
733	Ppfia4	2.24	2	0.06	3	0.13	
734	Rab27b	2.24	16	0.82	22	1.83	
735	RGD1561928	2.24	0	0.6	0	1.35	
736	RGD1562029	2.24	15	0.11	10	0.25	
737	RGD1564792	2.24	3	2.34	9	5.24	
738	Rn60_5_0814.26	2.24	0	0.21	0	0.46	
739	Robo3	2.24	1	0.06	3	0.14	
740	Scai	2.24	66	3.11	128	6.98	
741	Slc9a9	2.24	39	0.31	64	0.7	
742	St8sia1	2.24	8	0.8	19	1.8	
743	Styx	2.24	56	1.5	79	3.36	
744	Tal2	2.24	6	0.31	6	0.69	
745	Thoc1_2	2.24	3	1.05	8	2.36	
746	Tmem108	2.24	2	0.43	7	0.97	
747	Ttc39a	2.24	0	0.19	0	0.43	
748	Uaca	2.24	15	0.69	36	1.55	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
749	Uqcr10_2	2.24	2	3.77	6	8.46	
750	Usp50	2.24	27	0.23	28	0.52	
751	Wdr93	2.24	9	0.17	6	0.39	
752	Zbtb39	2.24	0	0.06	2	0.14	
753	AABR07001392.1	2.24	0	0.23	0	0.51	
754	AABR07020847.1	2.24	1	0.46	2	1.03	
755	AABR07027519.1	2.24	0	1.42	0	3.18	
756	AABR07031388.1	2.24	1	0.14	3	0.32	
757	AABR07031674.2	2.24	1	0.38	1	0.85	
758	AABR07036010.1	2.24	3	0.52	4	1.16	
759	AABR07043844.1	2.24	1	0.81	3	1.81	
760	AABR07053136.1	2.24	4	4.6	12	10.31	
761	AABR07055792.1	2.24	0	0.39	0	0.87	
762	AABR07059258.1	2.24	18	0.46	43	1.04	
763	AABR07071904.1	2.24	3	0.31	9	0.7	
764	AABR07072054.1	2.24	0	0.26	0	0.58	
765	AC121204.2	2.24	0	1.01	1	2.26	
766	AC130232.1	2.24	0	1.15	0	2.58	
767	AC131360.2	2.24	1	0.15	3	0.34	
768	AC133265.1	2.24	5	5.42	13	12.17	
769	Atp4a	2.24	2	0.1	10	0.23	
770	Bcl2l10	2.24	1	0.34	3	0.76	
771	Bmp15	2.24	2	0.24	6	0.54	
772	Btnl8	2.24	3	0.17	3	0.39	
773	Cacna1g	2.24	14	0.09	25	0.21	
774	Ccdc30	2.24	23	0.14	21	0.31	
775	Cldn2	2.24	1	0.08	4	0.18	
776	Dnaaf3	2.24	1	0.15	4	0.34	
777	Ears2_2	2.24	2	0.69	4	1.56	
778	Eng	2.24	3	0.36	12	0.8	
779	Fam213b	2.24	1	0.83	7	1.85	
780	Foxc1	2.24	1	0.09	3	0.2	
781	Frmd4b	2.24	22	0.49	47	1.1	
782	Frrs1l	2.24	4	0.41	8	0.92	
783	G6b	2.24	1	0.43	4	0.96	
784	Gabrq	2.24	1	0.19	3	0.43	
785	Gas2	2.24	4	0.14	7	0.31	
786	Gucy1a2	2.24	22	0.17	28	0.37	
787	Hgf	2.24	2	0.06	5	0.14	
788	Hhip	2.24	3	0.13	7	0.29	
789	Hydin	2.24	11	0.02	8	0.05	
790	Igip	2.24	1	2.23	3	5.01	
791	Klf2	2.24	3	1.03	9	2.31	
792	Klf5	2.24	16	2.12	52	4.77	
793	Klhl29	2.24	16	0.14	32	0.32	
794	Lacc1	2.24	5	1.35	17	3.03	
795	Lhb	2.24	1	0.16	5	0.35	
796	LOC100362342	2.24	2	0.47	6	1.06	
797	LOC100910173	2.24	16	2.46	36	5.52	
798	LOC100911295	2.24	0	1.24	0	2.79	
799	LOC100911776	2.24	0	0.57	1	1.29	
800	LOC100912283	2.24	2	0.41	6	0.92	
801	LOC500124	2.24	7	0.18	23	0.41	
802	LOC688130	2.24	1	0.44	3	0.98	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
803	Lrrc34	2.24	5	0.37	13	0.83	
804	Lrrc51	2.24	5	0.5	5	1.12	
805	Lym7	2.24	4	0.4	7	0.91	
806	Mansc1	2.24	5	0.63	13	1.42	
807	Map2k3	2.24	0	3.75	0	8.42	
808	MGC95208	2.24	2	2.7	13	6.06	
809	Mns1	2.24	7	0.2	5	0.45	
810	Mnt	2.24	22	3.7	46	8.3	
811	Muc6	2.24	7	0.21	17	0.47	
812	Ncf1	2.24	1	0.13	3	0.28	
813	Nr1h3	2.24	2	0.22	4	0.5	
814	Oas1h	2.24	2	0.21	6	0.48	
815	Olr119	2.24	1	0.38	3	0.85	
816	Ovol1	2.24	2	0.13	6	0.29	
817	Pear1	2.24	2	0.08	4	0.18	
818	Pfkfb4_2	2.24	0	0.32	0	0.71	
819	Pid1	2.24	11	0.5	23	1.12	
820	Prorsd1	2.24	3	1.05	9	2.37	
821	Prr20e	2.24	1	0.72	3	1.62	
822	Rab25	2.24	2	0.33	7	0.75	
823	RGD1308750	2.24	0	0.17	1	0.39	
824	RGD1561694	2.24	1	0.57	0	1.29	
825	RGD1562399	2.24	0	0.83	2	1.85	
826	RGD1563045	2.24	1	0.45	1	1.01	
827	RGD1564899	2.24	3	0.23	8	0.52	
828	RGD1565635	2.24	2	0.43	6	0.98	
829	Rnf17	2.24	4	0.07	7	0.16	
830	Rps19l1	2.24	0	0.77	3	1.72	
831	Rps27l3	2.24	0	0.8	0	1.79	
832	Rsph3	2.24	27	0.99	58	2.23	
833	SCARNA13_1	2.24	1	1.32	3	2.95	
834	SCARNA18_2	2.24	3	13.75	9	30.84	
835	Sdhaf3	2.24	10	0.71	10	1.59	
836	Sec31b	2.24	3	0.08	3	0.17	
837	Sertad4	2.24	6	0.74	18	1.66	
838	Sgtb	2.24	9	1.22	31	2.75	
839	Shank3	2.24	5	0.14	9	0.31	
840	Skida1	2.24	1	0.15	3	0.33	
841	Slc35g3	2.24	1	0.28	3	0.62	
842	Slc6a15	2.24	5	0.28	11	0.62	
843	Snap23	2.24	28	4.58	63	10.26	
844	SNORA52_1	2.24	0	2.7	0	6.06	
845	SNORA57_1	2.24	1	2.45	3	5.49	
846	SNORD31	2.24	2	10.81	6	24.24	
847	Sox9	2.24	1	0.11	3	0.24	
848	Spata1	2.24	11	0.39	18	0.87	
849	Spata17	2.24	18	0.21	23	0.47	
850	Spata31d1d	2.24	1	0.09	6	0.21	
851	Stk32c	2.24	8	0.17	7	0.37	
852	Tmeff1	2.24	9	0.73	27	1.64	
853	Tnfaip8l1	2.24	1	0.65	3	1.45	
854	Tnik	2.24	23	0.75	50	1.68	
855	Trpv2	2.24	2	0.13	5	0.29	
856	Upk1a	2.24	3	0.3	5	0.67	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
857	Zbtb16	2.24	9	0.14	12	0.31	
858	Zfand1	2.24	14	3.59	30	8.05	
859	Zfhx4	2.24	7	0.03	7	0.06	
860	Zfp54	2.24	10	0.7	16	1.57	
861	Zfp599	2.24	32	0.6	63	1.33	
862	Akt3	2.22	91	7.72	232	17.16	
863	Cox7a2_1	2.22	182	218.91	607	485.89	
864	Snf8	2.22	44	12.9	121	28.64	
865	Gpnmb	2.22	96	14.45	288	32.05	
866	Rictor	2.22	176	7.52	498	16.67	
867	Diaph3	2.22	51	3.09	153	6.86	
868	Surf6	2.22	43	5.01	82	11.11	
869	Amot	2.22	57	2.74	171	6.07	
870	Rbms1	2.21	268	13.04	616	28.88	
871	AABR07047011.1	2.21	16	2.58	47	5.7	
872	Rpl24	2.21	517	379.85	1569	839.2	
873	Sik2	2.21	559	20.8	1692	45.93	
874	Actg1	2.2	2	6.1	13	13.44	
875	Auh	2.2	52	5	112	11	
876	Myo1d	2.19	116	5.15	359	11.29	
877	Ifitm1	2.19	58	37.61	172	82.45	
878	Foxp1	2.19	535	36.66	1399	80.31	
879	AABR07026197.1	2.19	10	1.26	25	2.76	
880	Aatf	2.19	77	5.67	168	12.41	
881	Kif18a	2.18	19	1.24	42	2.71	
882	Serpinb6	2.18	150	37.25	432	81.15	
883	Pls3	2.18	491	46.1	1433	100.4	
884	RGD1564804	2.17	16	3.17	34	6.89	
885	Tnfrsf12a	2.17	34	12.41	108	26.98	
886	Ajuba	2.17	106	10.54	281	22.89	
887	Cdc42ep2	2.17	10	2.65	30	5.75	
888	Tns2	2.17	15	0.86	33	1.87	
889	Inadl	2.17	164	5.53	460	11.98	
890	Dock4	2.17	216	7.67	622	16.61	
891	Sqrdl	2.16	23	3.67	58	7.93	
892	LOC499339	2.16	45	6.52	72	14.06	
893	Chchd2	2.16	0	13.78	1	29.72	
894	Sash1	2.16	98	4.79	271	10.32	
895	Actn4	2.15	1176	108.37	3511	233.2	
896	Mss51	2.15	35	1.82	82	3.92	
897	Preli2	2.14	31	1.62	79	3.46	
898	Slc29a1	2.14	11	1.2	22	2.56	
899	Gypc	2.13	35	6.77	114	14.45	
900	Zhx1	2.13	5	2.16	11	4.6	
901	Prr15	2.13	151	37.87	431	80.73	
902	Dnajb4	2.13	112	13.85	293	29.49	
903	Ube2a	2.12	40	10.53	104	22.35	
904	AABR07001099.1	2.12	7	1.36	22	2.88	
905	Exoc6	2.12	35	1.43	72	3.04	
906	Gpld1	2.12	14	0.68	43	1.44	
907	Hectd2	2.12	25	0.86	64	1.81	
908	LOC100360150	2.12	3	3.52	8	7.46	
909	Rn60_10_0891.3	2.12	2	0.46	4	0.98	
910	Spon2_1	2.12	4	1.15	12	2.44	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
911	Dusp1	2.12	60	11.03	170	23.35	
912	Mttr12	2.11	78	5.73	166	12.09	
913	Ccdc174	2.11	24	3.47	57	7.32	
914	Zfp608	2.11	69	3.04	212	6.42	
915	Mtif2	2.11	42	1.51	52	3.17	
916	Utrn	2.11	365	6.37	887	13.41	
917	Gls	2.1	1592	58.51	4817	122.92	
918	Gatm	2.1	24	3.01	60	6.32	
919	Wt1	2.1	45	4.28	122	8.99	
920	Crebzf	2.1	127	20.73	307	43.48	
921	AABR07057196.1	2.09	5	2.39	16	5.01	
922	Agbl3	2.09	22	0.38	58	0.8	
923	LOC102554591	2.09	14	0.39	33	0.82	
924	Mtf1	2.09	0	0.42	0	0.88	
925	Pcdhb4	2.09	5	0.71	13	1.49	
926	SNORA7_1	2.09	0	12.93	0	27.07	
927	Zc2hc1a	2.09	32	3.18	95	6.65	
928	Bmper	2.09	12	0.48	20	1	
929	Rsg1	2.09	6	0.48	14	1.01	
930	Ahnak2	2.09	98	2.09	277	4.37	
931	Rab3gap2	2.09	141	8.55	385	17.86	
932	Pmepa1	2.09	41	4.15	83	8.66	
933	Col5a2	2.08	690	55.09	1975	114.81	
934	Nedd9	2.08	45	2.79	126	5.81	
935	Prkca	2.08	82	3.04	244	6.32	
936	Ppp2r1b	2.08	187	15.32	525	31.84	
937	Pkp2	2.08	140	15.22	415	31.63	
938	Arl4a	2.08	19	6.3	51	13.09	
939	Chmp6	2.08	26	6.27	63	13.03	
940	Katnal1_2	2.08	0	1.45	0	3.01	
941	1700021K19Rik	2.07	112	7.64	250	15.83	
942	Akap2	2.07	194	17.15	509	35.5	
943	Rock2	2.07	288	11.98	766	24.75	
944	Irs2	2.06	265	13.81	739	28.48	
945	AABR07031399.1	2.06	8	0.47	19	0.97	
946	AABR07037058.1	2.06	11	4.83	11	9.93	
947	RGD1310257	2.06	20	0.56	36	1.16	
948	AABR07010705.1	2.06	5	2.6	15	5.35	
949	AABR07042903.1	2.06	1	3.25	1	6.68	
950	Elovl6_1	2.06	0	1.3	2	2.68	
951	LOC100360791	2.06	6	5.58	14	11.47	
952	LOC100911361	2.06	13	4.9	41	10.08	
953	LOC102557117	2.06	1	7.79	9	16.01	
954	LOC103693683	2.06	5	0.42	20	0.87	
955	Mars2	2.06	0	0.82	0	1.69	
956	Nudt15	2.06	17	1.36	23	2.79	
957	Shq1	2.06	18	0.98	32	2.02	
958	Tmbim1	2.06	4	0.39	8	0.8	
959	Tmod1	2.06	23	1.14	40	2.35	
960	Wdr86	2.06	7	0.83	15	1.7	
961	Wisp2	2.06	5	0.8	15	1.65	
962	Metrn1	2.05	319	60.87	890	124.9	
963	Oca2	2.05	321	13.53	729	27.69	
964	Nid1	2.04	97	5.46	253	11.16	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
965	Rpl22l1	2.03	42	32.33	117	65.74	
966	Hmgcl1	2.03	24	0.65	56	1.33	
967	Srgap1	2.03	92	2.33	219	4.74	
968	Zgrf1	2.03	17	0.51	31	1.04	
969	Brip1	2.03	33	0.58	52	1.18	
970	Cox18	2.03	36	1.89	60	3.84	
971	Haus8	2.03	35	3.46	68	7.02	
972	Myc	2.03	24	3.25	59	6.6	
973	Sf3b6	2.03	25	13.63	59	27.65	
974	Tspyl5	2.03	7	2.06	19	4.17	
975	Stam2	2.03	72	8.08	171	16.39	
976	Snph	2.02	29	1.31	91	2.65	
977	Itgav	2.02	411	39.13	1082	79.15	
978	Coq7	2.02	15	3.96	33	7.99	
979	Tcaim	2.02	38	2.02	63	4.09	
980	Adamts6	2.02	47	2.06	176	4.17	
981	Inf2	2.02	52	4.84	148	9.77	
982	Pter	2.02	25	1.74	45	3.52	
983	Tcf19	2.02	11	4.32	27	8.72	
984	Arhgap21	2.02	328	14.73	841	29.72	
985	Ankrd50	2.02	143	5.7	386	11.5	
986	Mtr	2.02	96	5.19	243	10.46	
987	Olfml2a	2.02	35	2.03	97	4.09	
988	Zscan12	2.02	37	4.12	71	8.3	
989	Eapp	2.01	51	11.37	116	22.91	
990	Pam16	2.01	28	9.02	55	18.15	
991	Zscan20	2.01	26	1.26	64	2.54	
992	Ldlrad4	2	106	1.83	140	3.67	
993	Mcmcdc2	2	52	1.55	79	3.12	
994	Mllt4	2	390	20.01	1013	40.05	
995	Cttnbp2nl	2	134	8.83	341	17.67	
996	Esyt1	1.99	402	41.41	1055	82.61	Genes not used for Pathway Studio Analysis & not regulated by Ad-FOXO1(A3)
997	AABR07043748.2	1.99	10	1.47	11	2.93	
998	AABR07061336.1	1.99	0	2.06	1	4.1	
999	AABR07019083.1	1.99	9	4.28	29	8.53	
1000	AABR07035796.1	1.99	9	4.86	24	9.68	
1001	Adrb2	1.99	11	2.13	32	4.24	
1002	Casp12	1.99	16	1.59	24	3.17	
1003	Cyp3a9_1	1.99	3	0.65	8	1.3	
1004	Dgkb	1.99	30	0.17	67	0.33	
1005	Fam114a111	1.99	2	0.62	6	1.23	
1006	Fas	1.99	8	0.43	10	0.85	
1007	Homer2	1.99	9	1.09	26	2.18	
1008	Kihl31	1.99	4	0.18	10	0.35	
1009	Mfsd6	1.99	51	3.06	125	6.1	
1010	Ormdl1	1.99	39	2.94	68	5.87	
1011	Praf2	1.99	11	6.1	27	12.17	
1012	Trmt13	1.99	36	1.47	70	2.93	
1013	Colec12	1.99	25	0.75	37	1.5	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1014	Gfra2	1.99	6	0.39	10	0.78	
1015	Klc3	1.99	2	0.62	8	1.24	
1016	Rph3al	1.99	22	0.55	20	1.09	
1017	Rpl36al_1	1.99	0	3.38	0	6.75	
1018	Mospd3	1.99	157	54.87	414	109.03	
1019	Ppp1r18	1.99	21	4.08	52	8.1	
1020	Rb1cc1	1.98	183	7.6	490	15.04	
1021	Chn1	1.98	49	3.34	124	6.61	
1022	Zfp213	1.98	50	2.11	58	4.17	
1023	App1	1.97	47	5.58	122	11	
1024	Aldh1a1	1.97	476	75.53	1296	148.91	
1025	Golm1	1.97	29	3.34	63	6.57	
1026	Shisa7	1.97	14	0.65	32	1.29	
1027	Thbs1	1.97	5750	551.57	15413	1086.7	
1028	RGD1304622	1.97	27	2.02	68	3.96	
1029	Nrp2	1.97	181	9.21	504	18.11	
1030	Slc25a27	1.96	14	0.74	42	1.46	
1031	Sync	1.96	24	1.34	51	2.64	
1032	Trim44	1.96	40	5.47	65	10.71	
1033	Nrp1	1.96	119	7.13	316	13.96	
1034	Ankrd28	1.96	200	14.35	529	28.09	
1035	Mrpl32	1.95	37	16.97	97	33.13	
1036	MGC108823	1.95	27	16.35	75	31.93	
1037	Pxk	1.95	83	5.31	194	10.36	
1038	Zfp498	1.95	42	3.79	84	7.4	
1039	SNORD49_2	1.95	28	140.8	73	274.45	
1040	Slc2a12	1.94	7	0.44	15	0.85	
1041	Wwox	1.94	6	4.22	16	8.2	
1042	Cyp26b1	1.94	6	0.4	16	0.77	
1043	Exosc8	1.94	23	1.99	40	3.87	
1044	Mrfap1_1	1.94	1	0.42	3	0.81	
1045	Rbm11	1.94	6	0.98	15	1.9	
1046	Snx10	1.94	18	1.3	29	2.52	
1047	Ankrd44	1.94	121	5.01	303	9.7	
1048	AC094212.1	1.94	0	6.01	2	11.62	
1049	Terf2	1.94	67	6.21	133	12.02	
1050	Akap17a	1.94	59	5.78	144	11.18	
1051	Abl2	1.93	210	3.94	384	7.62	
1052	SNORD81	1.93	12	56.43	31	108.98	
1053	Ncam2	1.93	51	1.37	104	2.65	
1054	Cdc42ep3	1.93	42	7.23	114	13.93	
1055	Lclat1	1.93	41	2.81	78	5.41	
1056	Stc1	1.93	133	11.64	337	22.43	
1057	Myof	1.92	336	13.73	912	26.4	
1058	Apoe	1.92	28	6.52	76	12.53	
1059	Pcdh19	1.92	28	1.75	77	3.37	
1060	Pigb	1.92	12	1.16	30	2.23	
1061	Ranbp17	1.92	30	0.52	57	0.99	
1062	Rcor3	1.92	75	5.51	170	10.59	
1063	Ap3s1	1.92	47	8.45	111	16.22	
1064	Adgrl3	1.92	310	9.3	900	17.81	
1065	Fam204a	1.92	20	2.74	50	5.25	
1066	Col3a1	1.91	466	35.86	1210	68.68	
1067	Rpusd4	1.91	29	3.62	60	6.92	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1068	Tmem123	1.91	397	45.61	1021	87.08	
1069	Lrch1	1.91	136	7.71	356	14.71	
1070	Dusp16	1.91	53	6.08	130	11.6	
1071	Wwc1	1.91	42	1.97	98	3.75	
1072	Ank2	1.91	38	0.58	84	1.11	
1073	Kctd10	1.9	119	12.74	290	24.26	
1074	Zfp57	1.9	34	6.3	94	11.99	
1075	Itch	1.9	139	10.42	293	19.8	
1076	Kdm7a	1.9	65	6.67	149	12.68	
1077	Mospd2	1.9	49	2.89	112	5.49	
1078	Pgm2l1	1.9	95	5.37	273	10.2	
1079	Slc22a15	1.9	22	1.39	65	2.64	
1080	Ccdc107	1.9	19	9.94	43	18.87	
1081	Fhl2	1.89	49	10.24	134	19.39	
1082	Msrbb3	1.89	118	7.43	261	14.07	
1083	Atoh8	1.89	64	7.77	170	14.7	
1084	Nhs	1.89	20	1.07	50	2.03	
1085	Cnr1	1.89	23	1.26	67	2.38	
1086	Clec2g	1.89	134	20.86	338	39.4	
1087	Kif23	1.89	155	13.76	393	25.96	
1088	Plekhh2	1.89	39	1.69	91	3.19	
1089	Kalrn	1.88	87	0.97	144	1.82	
1090	RGD1566359	1.88	27	17.15	67	32.29	
1091	Wwc2	1.88	446	17.25	1161	32.46	
1092	Crebrf	1.87	120	4.92	289	9.23	
1093	AC126537.1	1.87	9	2.61	15	4.88	
1094	AC131360.1	1.87	5	0.78	9	1.46	
1095	Cabyr	1.87	14	0.35	15	0.65	
1096	Helq	1.87	31	1.31	69	2.45	
1097	Ints1_1	1.87	0	1.15	0	2.15	
1098	Nox4	1.87	20	1.35	80	2.53	
1099	Olr621_1	1.87	2	0.8	3	1.49	
1100	Phf11c	1.87	3	0.72	8	1.34	
1101	AABR07013776.1	1.87	2	1.63	5	3.05	
1102	AABR07059380.1	1.87	2	0.15	5	0.28	
1103	AC114343.1	1.87	0	0.38	0	0.71	
1104	AC119011.1	1.87	1	0.47	3	0.87	
1105	AC120727.2	1.87	0	5.97	0	11.17	
1106	Ap1ar	1.87	39	7.01	87	13.1	
1107	Avil	1.87	29	0.24	43	0.45	
1108	Bag3	1.87	119	16.72	298	31.26	
1109	Cd44	1.87	7	0.36	11	0.68	
1110	Cyp2c13_2	1.87	7	1.68	12	3.15	
1111	Dcbld2	1.87	158	19.15	433	35.78	
1112	Dnajc24	1.87	14	1.83	27	3.41	
1113	Efna5	1.87	21	3.26	79	6.1	
1114	Ehhadh	1.87	4	0.23	7	0.44	
1115	Entpd7_1	1.87	0	0.71	0	1.32	
1116	Fam174b	1.87	6	0.44	10	0.82	
1117	Gas1	1.87	2	0.63	5	1.17	
1118	Hfe	1.87	5	0.61	13	1.14	
1119	Iqub	1.87	5	0.24	14	0.45	
1120	Ispd	1.87	40	0.74	49	1.39	
1121	Klf13	1.87	22	3.61	39	6.74	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1122	Lgi2	1.87	3	0.12	5	0.23	
1123	Llph	1.87	1	1.9	2	3.55	
1124	LOC685963	1.87	0	3.4	0	6.35	
1125	Mcur1	1.87	11	2.15	23	4.02	
1126	Nckap5	1.87	32	0.12	32	0.22	
1127	Nek11	1.87	17	0.55	18	1.02	
1128	Pde4dip	1.87	155	1.98	273	3.71	
1129	Plcg2	1.87	7	0.19	11	0.36	
1130	Plekhg6	1.87	6	0.31	8	0.58	
1131	Pmel	1.87	5	0.3	7	0.56	
1132	Rab19	1.87	3	0.34	10	0.64	
1133	RGD1564698	1.87	2	1.3	2	2.43	
1134	Rn60_14_0447.1	1.87	0	0.81	0	1.51	
1135	Rpl38_1	1.87	0	3.4	0	6.35	
1136	Rpl39_4	1.87	0	9.28	0	17.35	
1137	Slfn1	1.87	3	0.42	19	0.78	
1138	Zfp78	1.87	2	0.47	6	0.88	
1139	Zfyve28	1.87	7	0.18	16	0.34	
1140	Znhit3	1.87	7	3.18	15	5.94	
1141	AABR07001210.1	1.87	3	0.27	8	0.51	
1142	AABR07004112.1	1.87	0	0.29	0	0.54	
1143	AABR07068587.1	1.87	2	2.01	5	3.76	
1144	AC118490.1	1.87	1	0.66	1	1.23	
1145	Casp4	1.87	3	0.59	7	1.11	
1146	Cnga2_2	1.87	2	0.21	4	0.39	
1147	Exph5	1.87	22	0.54	50	1	
1148	LOC100910735	1.87	0	0.44	0	0.82	
1149	Lyar	1.87	44	4.47	82	8.36	
1150	Mroh8	1.87	8	0.22	18	0.4	
1151	Mustn1	1.87	2	0.66	5	1.24	
1152	Nbeal1	1.87	88	2.42	220	4.53	
1153	Nrxn1	1.87	18	0.52	25	0.96	
1154	Pard3b	1.87	125	2.41	261	4.5	
1155	Plet1	1.87	4	0.96	10	1.79	
1156	RGD1307621	1.87	13	2.29	27	4.28	
1157	RGD1559962	1.87	0	1.15	0	2.15	
1158	Rwdd3	1.87	15	1.37	23	2.56	
1159	SNORD49_1	1.87	2	10.2	5	19.06	
1160	Vegfc	1.87	58	7.14	145	13.34	
1161	Aebp2	1.86	168	8.56	314	15.92	
1162	Slc12a2	1.86	234	11.14	537	20.68	
1163	Rin2	1.85	224	10.54	478	19.53	
1164	Arap2	1.85	35	1.04	78	1.93	
1165	Ppap2b	1.85	81	7.41	183	13.71	
1166	Cdh11	1.85	74	4.27	200	7.9	
1167	Fam69a	1.85	29	3.08	65	5.7	
1168	Gnaq	1.85	125	14.24	244	26.31	
1169	Sptb	1.85	32	0.84	64	1.55	
1170	Tbcb	1.85	0	11.37	2	21	
1171	Epb4.1	1.85	149	8.71	344	16.07	
1172	Crocc	1.84	33	0.76	46	1.39	
1173	Traf5	1.84	22	3.24	61	5.97	
1174	Sema4g	1.84	13	1.09	39	2	
1175	Sclt1	1.84	117	5.71	301	10.51	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1176	Tmtc1	1.84	28	1.53	82	2.82	
1177	Wdr47	1.84	54	3.44	139	6.34	
1178	Heatr3	1.84	55	3.96	127	7.27	
1179	Gnb4	1.84	88	18.7	220	34.37	
1180	Hivep2	1.84	26	0.92	61	1.7	
1181	Tln1	1.84	1178	48.36	2884	88.84	
1182	AY172581.15	1.84	22	115.44	54	211.85	
1183	Steap3	1.84	13	1.33	31	2.44	
1184	Rn60_11_0375.8	1.84	18	9.66	45	17.72	
1185	Gabpb2	1.84	16	2.71	39	4.97	
1186	Gopc	1.83	71	6.23	176	11.42	
1187	Rab9a	1.83	36	5.69	73	10.43	
1188	Prr36	1.83	32	3.24	77	5.93	
1189	LOC100911867	1.83	107	6.94	265	12.71	
1190	Myo10	1.83	502	21.21	1203	38.82	
1191	Spata5l1	1.83	15	1.3	40	2.38	
1192	AABR07050417.1	1.83	22	2.25	50	4.11	
1193	Hook3	1.83	294	4.59	580	8.39	
1194	Kifc2	1.83	10	0.94	22	1.72	
1195	Sdhaf4	1.83	16	10.34	36	18.91	
1196	Rasa3	1.83	79	6.63	201	12.1	
1197	Lrfn4	1.82	7	3.82	19	6.97	
1198	Sdr39u1	1.82	42	6.18	87	11.27	
1199	Cast	1.82	589	15.91	1029	29.01	
1200	Fzd7	1.82	16	2.05	39	3.74	
1201	Cchcr1	1.82	43	4.87	85	8.87	
1202	Fgd4	1.82	40	1.19	92	2.17	
1203	Akap13	1.82	455	10.78	1069	19.61	
1204	Clic5	1.82	18	0.53	32	0.96	
1205	Ccdc66	1.82	67	3.48	131	6.32	
1206	Dusp10	1.82	19	1.87	48	3.4	
1207	Esyt2	1.82	115	11.98	309	21.76	
1208	Laptm5	1.82	9	1.08	19	1.96	
1209	LOC100912537	1.82	0	1.42	0	2.58	
1210	Metazoa_SRP_22	1.82	2	33.68	11	61.15	
1211	Pltp	1.82	10	1.25	19	2.27	
1212	Arhgap22	1.82	15	0.88	36	1.6	
1213	Hspa4l	1.82	9	0.61	23	1.11	
1214	LOC100912399_2	1.82	0	0.64	0	1.16	
1215	lfrd1	1.81	135	17.99	321	32.65	
1216	Mef2c	1.81	72	3.03	191	5.5	
1217	SNORD22_1	1.81	32	94.83	79	171.87	
1218	Plxdc2	1.81	1127	99.68	3019	180.53	
1219	Lifr	1.81	118	6.85	283	12.41	
1220	AABR07002624.1	1.81	0	73.57	0	133.18	
1221	Zfp397	1.81	22	3.34	52	6.04	
1222	Mtus1	1.81	92	4.04	247	7.32	
1223	Rnf19a	1.81	299	22.05	725	39.82	
1224	Tgds	1.81	83	7.62	136	13.76	
1225	Ccdc109b	1.8	172	42.4	463	76.49	
1226	Zfp90	1.8	32	2.74	60	4.94	
1227	Chrdl1	1.8	619	24.07	1684	43.31	
1228	Zfp105	1.8	57	5.78	119	10.4	
1229	Lgals3	1.8	41	10.67	87	19.19	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1230	Gng12	1.8	95	21.51	194	38.67	
1231	Sepp1	1.8	56	30.92	138	55.56	
1232	Myl12a	1.8	1835	736.78	4607	1322.9	
1233	Acot13	1.79	11	2.37	24	4.26	
1234	Cav2	1.79	6	0.73	14	1.31	
1235	Ccdc57	1.79	57	0.59	84	1.06	
1236	Exnef	1.79	27	0.58	35	1.05	
1237	Fhl4	1.79	6	0.94	13	1.68	
1238	LOC684270	1.79	22	1.96	38	3.52	
1239	Ppm1m	1.79	18	2.24	40	4.01	
1240	Rbm12_2	1.79	0	0.58	0	1.05	
1241	Y_RNA_8	1.79	10	35.5	24	63.69	
1242	Alg6	1.79	31	2.38	43	4.26	
1243	Arhgap42	1.79	117	5.96	271	10.69	
1244	Atg16l2	1.79	35	3.45	69	6.2	
1245	Btbd3	1.79	45	6.79	110	12.19	
1246	Ccdc138	1.79	13	0.88	25	1.59	
1247	Lnpep	1.79	0	1.84	1	3.31	
1248	Slc44a3	1.79	10	1	16	1.79	
1249	Vom2r44	1.79	10	0.26	14	0.47	
1250	Wbp4	1.79	42	3.52	60	6.31	
1251	Acrbp	1.79	8	1.44	13	2.58	
1252	Ccdc171	1.79	18	0.41	29	0.73	
1253	Pcnp	1.79	83	31.77	168	56.92	
1254	Arhgap29	1.79	665	37.89	1620	67.83	
1255	Klhl28	1.79	39	3.34	91	5.97	
1256	LOC100360449	1.79	0	84.42	0	151.01	
1257	Syap1	1.79	148	16.27	321	29.1	
1258	Rasa2	1.79	74	2.55	169	4.56	
1259	Cd24	1.79	28	7.06	65	12.61	
1260	Cep97	1.79	25	2.02	67	3.61	
1261	Cnn3	1.78	461	75.14	1094	134.12	
1262	AABR07002774.1	1.78	16	1.77	33	3.15	
1263	Osbpl3	1.78	32	1.38	85	2.46	
1264	Synpo2	1.78	38	1.14	64	2.02	
1265	Bicc1	1.78	322	20.18	794	35.96	
1266	AABR07047262.1	1.78	5	3.99	18	7.1	
1267	Wipf2	1.78	51	5.48	97	9.75	
1268	Mt-nd6	1.78	395	281.84	943	501.22	
1269	RGD1562136	1.78	85	9.81	193	17.45	
1270	Dsp	1.78	49	1.82	117	3.23	
1271	Hrct1	1.78	8	9.02	19	16.02	
1272	Otud3	1.78	23	1.52	43	2.7	
1273	LOC100364500	1.78	5	2.51	12	4.46	
1274	Parp16	1.78	17	1.87	33	3.32	
1275	Zfp518a	1.78	39	1.71	80	3.03	
1276	LOC100911093	1.77	45	8.3	104	14.73	
1277	Tcp1111	1.77	64	6.78	135	12.03	
1278	Fads3	1.77	85	17.58	196	31.16	
1279	Dab2	1.77	252	26.9	639	47.69	
1280	Rgl1	1.77	226	12.14	537	21.5	
1281	Nol10	1.77	86	5.81	164	10.3	
1282	Mtss1l	1.77	96	8.82	253	15.63	
1283	AABR07054370.1	1.77	84	41.32	193	73.16	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1284	Paqr8	1.77	21	4.3	52	7.62	
1285	Gspt1	1.77	380	20.92	873	37.05	
1286	Nit2	1.77	82	18.31	178	32.39	
1287	Arhgef25	1.77	51	7.57	127	13.38	
1288	Pawr	1.77	308	28.99	798	51.16	
1289	Tulp4	1.76	431	20.55	951	36.27	
1290	Arhgap17	1.76	306	20.16	774	35.54	
1291	Aff3	1.76	220	4.96	476	8.75	
1292	Hnrnp3	1.76	127	5.82	221	10.26	
1293	Lpar4	1.76	16	1.22	35	2.14	
1294	Samhd1	1.76	16	1.73	36	3.05	
1295	Ndr4	1.76	85	7.3	181	12.86	
1296	AC120246.2	1.76	22	4.19	46	7.37	
1297	Micall1	1.76	17	0.88	40	1.55	
1298	RGD1311747	1.76	34	5.4	73	9.49	
1299	AC118147.2	1.76	30	2.02	75	3.55	
1300	Nek1	1.75	57	2.33	107	4.08	
1301	RGD1309079	1.75	225	14.27	524	25	
1302	Pdlim7	1.75	92	15.62	211	27.36	
1303	Rai14	1.75	226	14.82	543	25.94	
1304	Msn	1.75	327	23.61	759	41.29	
1305	Nrg1	1.75	129	3.63	262	6.34	
1306	Aktip	1.75	72	14.45	179	25.26	
1307	Fmo4	1.74	5	0.46	14	0.8	
1308	Abat	1.74	14	0.41	11	0.72	
1309	Adhfe1	1.74	14	0.55	9	0.96	
1310	Adra1b	1.74	7	0.44	16	0.76	
1311	Atf3	1.74	6	0.37	10	0.65	
1312	Esrp1	1.74	3	0.28	9	0.49	
1313	Gpr37	1.74	4	0.34	8	0.59	
1314	Grip1	1.74	7	0.24	27	0.42	
1315	Kcna4	1.74	3	0.35	7	0.61	
1316	Kcnj3	1.74	10	0.59	9	1.04	
1317	Kctd20	1.74	68	14.69	140	25.63	
1318	Klhl34	1.74	3	0.56	7	0.98	
1319	LOC100361061	1.74	3	7.17	5	12.51	
1320	LOC100911545	1.74	0	0.25	0	0.43	
1321	Mageb7	1.74	2	1.01	4	1.76	
1322	Mfsd8	1.74	36	1.93	61	3.36	
1323	Ngrn	1.74	45	6.52	81	11.38	
1324	Rel	1.74	4	0.61	10	1.07	
1325	Rn60_4_1636.2	1.74	3	1.23	7	2.14	
1326	Uchl3	1.74	1	1.57	0	2.73	
1327	Zfp2	1.74	14	1.57	27	2.74	
1328	Zfp341	1.74	11	1.69	20	2.95	
1329	AABR07036732.1	1.74	12	0.56	26	0.97	
1330	Arhgef12	1.74	279	13.61	609	23.74	
1331	Birc3	1.74	10	0.96	17	1.67	
1332	Btbd16	1.74	9	0.57	13	1	
1333	Etv5	1.74	13	1.11	36	1.94	
1334	Glipr1	1.74	7	2.14	29	3.74	
1335	Homer1	1.74	35	1.49	59	2.59	
1336	Hykk	1.74	8	0.43	12	0.76	
1337	Prkag3	1.74	3	0.4	11	0.69	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1338	RGD1564036	1.74	31	1.72	40	2.99	
1339	RT1-T24-4	1.74	4	1.99	9	3.47	
1340	Srf	1.74	128	10.32	301	18.01	
1341	Tceanc	1.74	3	1.01	7	1.76	
1342	Zfp536	1.74	13	0.5	18	0.88	
1343	Myh10	1.74	3284	148.91	7628	259.3	
1344	Ccpg1	1.74	174	15.1	397	26.24	
1345	Slc25a24	1.74	116	9.81	263	17.03	
1346	Amotl1	1.74	58	3.49	104	6.06	
1347	Mprp	1.73	806	31.29	1856	54.23	
1348	Tcp11l2	1.73	68	9.6	168	16.63	
1349	Slit2	1.73	102	3.73	271	6.46	
1350	Mphosph10	1.73	45	6.25	109	10.81	
1351	Fgl2	1.73	3	1.87	1	3.23	
1352	RGD1311863	1.73	42	5.06	75	8.76	
1353	Plekhh1	1.73	69	2.91	145	5.03	
1354	Pcdh7	1.73	205	18.61	468	32.18	
1355	MGC112715	1.73	7	3.1	10	5.36	
1356	Ppip5k1	1.73	266	5.86	485	10.12	
1357	Slfn13	1.73	294	17.41	692	30.04	
1358	Zfp560	1.73	14	1.47	29	2.53	
1359	AABR07043421.1	1.73	5	3.39	9	5.86	
1360	Tmem170b	1.73	32	5	78	8.63	
1361	RGD1308139	1.72	29	4.53	48	7.8	
1362	Basp1	1.72	73	12.77	159	22.01	
1363	LOC100911874_2	1.72	39	7.38	103	12.71	
1364	Cript	1.72	33	8.36	82	14.39	
1365	Macf1	1.72	1176	13.14	2689	22.61	
1366	AABR07003537.1	1.72	7	5.92	19	10.17	
1367	Ccdc39	1.72	44	0.89	101	1.53	
1368	Fnip1	1.72	65	4.22	149	7.26	
1369	Ier5	1.72	31	7.94	72	13.65	
1370	Adm	1.72	10	2.61	23	4.49	
1371	Cetn3	1.72	0	3.07	2	5.28	
1372	Dkk4	1.72	29	2.43	44	4.18	
1373	LOC690871	1.72	16	7.99	26	13.74	
1374	Tead3	1.72	35	2.47	97	4.24	
1375	Tns1	1.72	66	2.78	124	4.78	
1376	Prex2	1.72	251	9.6	593	16.48	
1377	Rufy1	1.72	91	8.28	220	14.21	
1378	Cdc27	1.72	195	16.67	425	28.6	
1379	Chic2	1.72	55	5.63	105	9.66	
1380	RGD1563348	1.72	24	9.41	48	16.14	
1381	Tead1	1.71	177	11.51	414	19.74	
1382	Wwc3	1.71	114	6.27	271	10.75	
1383	Arhgap6	1.71	204	24.89	480	42.64	
1384	Cadps2	1.71	99	3.05	194	5.23	
1385	Sri	1.71	86	32.49	210	55.61	
1386	S100a11	1.71	188	256.01	415	437.48	
1387	Arid4b	1.71	0	0.69	0	1.18	
1388	Top1mt	1.71	29	3.22	58	5.51	
1389	Ybey	1.71	10	0.57	16	0.98	
1390	Cys1	1.71	12	0.86	18	1.46	
1391	Dclk1	1.71	83	1.78	182	3.05	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1392	Mtrf11	1.71	24	2.07	26	3.54	
1393	Pcsk6	1.71	30	1.83	52	3.13	
1394	Plcx2	1.71	7	0.32	21	0.55	
1395	Sema3d	1.71	15	0.51	22	0.87	
1396	Snapc2	1.71	42	8.92	100	15.24	
1397	Sp140	1.71	69	4.68	162	8	
1398	Mbnl1	1.71	183	22.59	408	38.58	
1399	Rsb1	1.71	64	2.1	121	3.57	
1400	Nagk	1.71	44	7.79	109	13.28	
1401	Calcoco1	1.71	0	10.53	0	17.96	
1402	Nupr1_1	1.7	0	28.29	0	48.22	
1403	S100a6	1.7	70	52.16	155	88.89	
1404	Agtbbp1	1.7	78	3.39	151	5.78	
1405	Nsun6	1.7	38	3.2	61	5.45	
1406	Phlda1	1.7	140	27.39	314	46.63	
1407	Ctnna3_2	1.7	58	19.06	124	32.44	
1408	Lrrn3	1.7	788	86.21	1828	146.61	
1409	AABR07001910.1	1.7	11	1.51	24	2.57	
1410	AABR07057519.1	1.7	12	1.27	25	2.16	
1411	AABR07068341.1	1.7	11	1.75	30	2.97	
1412	Hnrnpa3_1	1.7	38	48.91	68	83.11	
1413	Mtfr1	1.7	11	3.74	24	6.35	
1414	Ndst2	1.7	0	1.16	0	1.98	
1415	Serpinb6b	1.7	11	3.52	27	5.98	
1416	AABR07015080.2	1.7	0	9.69	0	16.47	
1417	Elk3	1.7	14	1.04	31	1.77	
1418	Tipin1	1.7	21	7.99	40	13.56	
1419	Alcam	1.7	126	10.86	305	18.4	
1420	Sh3kbp1	1.69	55	3.07	94	5.2	
1421	Znhit1	1.69	22	4.4	35	7.46	
1422	Epb41l2	1.69	164	12.81	356	21.68	
1423	Rnf103	1.69	84	5.94	173	10.05	
1424	Fam49a	1.69	64	3.17	145	5.36	
1425	Zfp704	1.69	75	4.91	164	8.3	
1426	Gab2	1.69	263	19.25	559	32.47	
1427	Cux1	1.69	317	14.77	670	24.9	
1428	Ptpn13	1.69	180	6.26	391	10.55	
1429	Ppfibp1	1.68	742	42.07	1686	70.88	
1430	Birc2	1.68	82	8.79	205	14.81	
1431	Adamts1	1.68	19	0.19	20	0.32	
1432	Arl14ep	1.68	47	6.6	81	11.1	
1433	Atp6v0a4	1.68	12	0.45	24	0.75	
1434	Bves	1.68	20	2.94	72	4.94	
1435	Cdkn2c	1.68	9	2.02	21	3.4	
1436	Flywch2	1.68	8	2.35	12	3.95	
1437	Grb10	1.68	5	0.28	14	0.47	
1438	Oraov1	1.68	6	2.16	18	3.64	
1439	Rdh16	1.68	70	0.62	129	1.04	
1440	Unc13b	1.68	33	0.47	39	0.8	
1441	Adam19	1.68	77	3.69	160	6.2	
1442	Dusp8	1.68	8	1.48	19	2.49	
1443	Fgd6	1.68	8	0.26	19	0.44	
1444	Gzmb_2	1.68	3	0.94	5	1.58	
1445	Kri1	1.68	32	2.77	55	4.67	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1446	Mib1	1.68	230	12.26	484	20.62	
1447	Mrc1	1.68	10	0.28	14	0.47	
1448	Pcdhb17	1.68	4	0.6	9	1.02	
1449	Pdss1	1.68	28	1	52	1.69	
1450	Plagl1	1.68	7	0.62	18	1.05	
1451	Ppih	1.68	7	7.5	22	12.62	
1452	Slc6a17	1.68	6	0.24	13	0.41	
1453	Y_RNA_9	1.68	4	12.93	9	21.75	
1454	Zfp3	1.68	8	1.18	19	1.99	
1455	AABR07070810.1	1.68	0	2.91	1	4.89	
1456	Hivep3	1.68	6	0.13	11	0.22	
1457	Zbtb46	1.68	31	1	51	1.69	
1458	Phex	1.68	99	7.64	220	12.83	
1459	Mrps9	1.68	61	9.56	123	16.03	
1460	RGD1311595	1.68	124	4.56	261	7.64	
1461	Ankle2	1.68	244	12.75	494	21.35	
1462	F2r	1.67	251	26.03	585	43.59	
1463	Bmp4	1.67	47	7.71	113	12.91	
1464	Gpbp1l2	1.67	11	2.29	22	3.83	
1465	Psd3	1.67	389	12.62	754	21.12	
1466	Trim59	1.67	25	2.74	52	4.59	
1467	LOC361990	1.67	245	21.19	432	35.44	
1468	Cpd	1.67	682	45.89	1518	76.72	
1469	Asap2	1.67	65	4.2	143	7.03	
1470	Eif4e3	1.67	20	2.42	54	4.05	
1471	Kirrel	1.67	218	10.58	497	17.67	
1472	Lhfp	1.67	110	14.25	312	23.77	
1473	Rab33a	1.67	18	3.47	40	5.78	
1474	Cpne8	1.67	43	2.79	105	4.65	
1475	Zfp385a	1.67	14	1.81	31	3.02	
1476	Prtfdc1	1.67	292	18.96	682	31.6	
1477	Cd2ap	1.67	78	8.06	165	13.44	
1478	Jak1	1.67	1157	89.78	2668	149.57	
1479	Golga4	1.66	330	13.47	740	22.41	
1480	Lrrk2	1.66	73	1.38	117	2.29	
1481	Gclm	1.66	61	11.94	122	19.86	
1482	AABR07042397.1	1.66	0	12.23	0	20.34	
1483	Prx	1.66	11	0.7	26	1.17	
1484	Kctd9	1.66	68	6.29	160	10.46	
1485	Lama5	1.66	40	1.15	85	1.91	
1486	LOC100360638_1	1.66	17	2.8	38	4.66	
1487	Spdl1	1.66	15	1.42	24	2.36	
1488	Tigd2	1.66	9	2.06	20	3.42	
1489	Heg1	1.66	591	30.25	1319	50.23	
1490	Fhl1	1.66	177	22.27	398	36.98	
1491	Alpk1	1.66	65	2.15	153	3.57	
1492	Hnrnpdl	1.66	119	17.37	247	28.81	
1493	Mxra7	1.66	147	14.98	239	24.83	
1494	Syne2	1.66	1476	21.3	3109	35.3	
1495	Plxna2	1.66	239	6.81	551	11.28	
1496	Gsn	1.66	182	23.34	420	38.66	
1497	Brd9	1.66	143	10.26	254	16.99	
1498	Errfi1	1.66	91	8.5	201	14.08	
1499	Tgfb2	1.66	37	3.64	84	6.03	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1500	Timm8a1_2	1.66	14	10.74	27	17.78	
1501	Itgb1	1.66	1209	116	2674	192.03	
1502	Sacs	1.65	117	2.48	258	4.1	
1503	Gpatch2	1.65	64	4.03	139	6.66	
1504	Mmadhc	1.65	41	9.76	94	16.14	
1505	Rnft1	1.65	27	5.76	60	9.52	
1506	Taf7	1.65	19	3.9	42	6.44	
1507	Hnrnpr	1.65	41	8.53	96	14.09	
1508	Mlit3	1.65	56	3.56	99	5.88	
1509	Nlrp1a	1.65	28	1.23	67	2.03	
1510	Tmem65	1.65	131	3.54	246	5.85	
1511	Npl	1.65	99	9.03	254	14.9	
1512	Rapgef6	1.65	98	2.66	156	4.38	
1513	AABR07000121.1	1.64	12	0.59	27	0.98	
1514	AABR07052388.1	1.64	10	2.06	22	3.39	
1515	AABR07061378.1	1.64	0	7.75	0	12.75	
1516	Jag1	1.64	25	1.62	63	2.67	
1517	Kif5a	1.64	13	0.29	24	0.48	
1518	Nudt8	1.64	7	2.23	11	3.66	
1519	Reps2	1.64	24	2.03	37	3.34	
1520	Rhpn2	1.64	9	0.57	21	0.93	
1521	Surf2	1.64	0	1.56	0	2.57	
1522	Tsen54	1.64	32	3.66	60	6.02	
1523	Depdc7	1.64	13	2.12	25	3.49	
1524	ldnk	1.64	21	1.1	26	1.81	
1525	Ino80b	1.64	0	3.17	2	5.21	
1526	Lrp2	1.64	21	0.23	27	0.38	
1527	Cspg4	1.64	102	4.3	226	7.07	
1528	Bnip2	1.64	286	14.91	515	24.49	
1529	Rasa1	1.64	217	20.18	471	33.13	
1530	Otud4	1.64	133	11.15	298	18.3	
1531	Emp2	1.64	77	8.33	167	13.67	
1532	Pde7a	1.64	70	4.02	138	6.59	
1533	Itga3	1.64	86	6.49	195	10.65	
1534	Med22_2	1.64	0	14.54	1	23.85	
1535	Eif5a2	1.64	41	3.12	94	5.11	
1536	Esco1	1.64	115	5.88	191	9.62	
1537	Fbxw7	1.64	50	3.71	113	6.07	
1538	Fbxo30	1.64	78	8.36	172	13.68	
1539	RGD1307235	1.64	160	5.97	315	9.77	
1540	Vps26a	1.64	78	13.77	158	22.53	
1541	Slc38a4	1.64	25	1.44	50	2.36	
1542	Als2cl	1.64	25	2.03	49	3.31	
1543	Crcp	1.64	48	3.75	79	6.13	
1544	Nhs1	1.63	60	2.81	135	4.59	
1545	Svil	1.63	189	6.7	427	10.95	
1546	Mpdz	1.63	156	5.42	315	8.86	
1547	Plcd1	1.63	30	3.56	71	5.82	
1548	Smpdl3a	1.63	28	5.49	63	8.96	
1549	Sp4	1.63	52	3.98	119	6.5	
1550	AABR07015956.1	1.63	19	3.72	43	6.07	
1551	Ccs	1.63	26	3.59	62	5.86	
1552	Lrrc61	1.63	16	1.44	24	2.34	
1553	Cacul1	1.63	151	11.45	342	18.67	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1554	Ctnna2	1.63	17	2.78	35	4.54	
1555	Fam92a1	1.63	39	7.46	54	12.17	
1556	Strn	1.63	107	7.19	200	11.72	
1557	Taok1	1.63	181	16.29	367	26.53	
1558	SNORD24_3	1.63	28	123.63	61	201.37	
1559	Fbrs	1.63	22	7.24	39	11.79	
1560	Ydjc	1.63	34	7.19	66	11.71	
1561	Mrpl18	1.63	27	6.51	54	10.6	
1562	Fam63b	1.63	42	3.88	91	6.3	
1563	Nr3c1_2	1.62	29	8.47	61	13.76	
1564	C2cd2	1.62	72	3.83	144	6.21	
1565	Stx7	1.62	24	8.23	48	13.34	
1566	Ptrf	1.62	1292	144.9	2811	234.98	
1567	Mtmr6	1.62	162	13.66	339	22.14	
1568	Sacm1l	1.62	154	11.43	296	18.54	
1569	RGD1566386	1.62	19	0.72	23	1.16	
1570	B3galt4	1.62	6	1.38	13	2.23	
1571	Fam207a	1.62	46	5	87	8.1	
1572	Gnao1	1.62	46	1.05	54	1.7	
1573	Irx3	1.62	6	1.39	13	2.25	
1574	LOC100912195	1.62	24	12.26	52	19.85	
1575	LOC102550026	1.62	3	0.72	11	1.16	
1576	03/03/15	1.62	33	1.12	60	1.82	
1577	Nell1	1.62	36	0.75	53	1.22	
1578	Nfatc4	1.62	14	0.72	28	1.17	
1579	Pecr	1.62	11	1.76	20	2.86	
1580	Cdo1	1.62	14	2.87	32	4.64	
1581	Fnbp1	1.62	84	4.07	140	6.6	
1582	RGD1311458	1.62	18	2.08	35	3.36	
1583	Serpinc1	1.62	128	0.63	238	1.02	
1584	Acot9	1.62	48	9.6	112	15.52	
1585	Ptpn14	1.62	64	3.15	124	5.09	
1586	Itga1	1.62	82	5.38	186	8.7	
1587	Mettl16	1.61	45	4.51	92	7.29	
1588	Pggt1b	1.61	44	5.79	82	9.35	
1589	Sptbn1	1.61	1642	70.62	3528	113.98	
1590	Cdc45	1.61	30	1.08	57	1.74	
1591	Ddit3	1.61	38	7.44	71	12	
1592	Dixdc1	1.61	35	1.22	63	1.97	
1593	Hlcs	1.61	152	4.87	218	7.86	
1594	Zfp874b	1.61	38	4.3	58	6.95	
1595	AABR07056556.2	1.61	0	102.81	0	165.66	
1596	Pvrl3	1.61	202	12.88	416	20.76	
1597	Cfdp1	1.61	201	13.37	431	21.54	
1598	AABR07015055.1	1.61	0	11.45	0	18.44	
1599	Chmp4c	1.61	24	2.96	37	4.76	
1600	lpo11	1.61	85	4.82	123	7.76	
1601	Cpq	1.61	133	16.13	297	25.96	
1602	LOC103690317	1.61	51	33.51	110	53.93	
1603	Atp6v1f	1.61	47	25.9	98	41.68	
1604	Zbtb47	1.61	44	5.46	91	8.79	
1605	Tbl1xr1	1.61	128	4.95	303	7.96	
1606	Bloc1s6	1.61	56	4.16	109	6.69	
1607	09/01/15	1.61	48	11.55	118	18.56	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1608	Tuft1	1.61	31	2.13	63	3.42	
1609	AABR07058124.3	1.61	20	23.21	43	37.31	
1610	Sub1	1.61	66	35.44	116	56.93	
1611	Prss23	1.61	777	105.68	1699	169.68	
1612	Chd2	1.61	265	7.68	551	12.34	
1613	Nol8	1.61	3	2.67	3	4.28	
1614	LOC100361139	1.6	49	42.08	103	67.51	
1615	Erbp2ip	1.6	252	13.49	509	21.63	
1616	Pkd1l3	1.6	461	0.38	515	0.61	
1617	Zfp40	1.6	14	1.78	30	2.85	
1618	Zswim7	1.6	32	3.62	38	5.8	
1619	AABR07032135.1	1.6	12	5.04	26	8.07	
1620	Hacd1	1.6	27	3.52	74	5.63	
1621	Map4k5	1.6	161	10	345	16.01	
1622	RGD1564883	1.6	0	3.53	2	5.66	
1623	Rpl39_1	1.6	0	16.25	0	26.03	
1624	Rundc3b	1.6	21	0.68	28	1.08	
1625	Tomm70a	1.6	25	9.04	74	14.48	
1626	Vash2	1.6	44	2.7	101	4.32	
1627	AABR07001899.1	1.6	120	0.79	160	1.26	
1628	AABR07071814.2	1.6	14	3.6	30	5.77	
1629	Zfp28	1.6	16	1.98	32	3.17	
1630	Mtx2	1.6	73	10.75	114	17.2	
1631	Potef	1.6	802	674.81	2124	1079.1	
1632	Vrk1	1.6	70	5.59	118	8.94	
1633	Cfl2	1.6	117	14.36	251	22.96	
1634	Farp1	1.6	164	6.9	333	11.03	
1635	Myo1c	1.6	511	47.97	1098	76.66	
1636	Shoc2	1.6	144	14.75	303	23.56	
1637	Klf8	1.6	27	1.45	55	2.31	
1638	Tgfb1i1	1.6	188	32.46	389	51.85	
1639	Lrrc2	1.6	61	4.85	153	7.74	
1640	Rc3h1	1.6	195	8.4	392	13.41	
1641	Testin	1.59	16	3.98	34	6.35	
1642	Tmed5	1.59	43	5.9	89	9.41	
1643	Slc4a1ap	1.59	66	5.08	113	8.1	
1644	AABR07021704.1	1.59	41	4.1	79	6.53	
1645	Kcnma1	1.59	141	4.04	288	6.44	
1646	Fgd3	1.59	77	4.91	168	7.82	
1647	Pros1	1.59	839	84.32	1863	134.34	
1648	Emb	1.59	27	7.81	53	12.44	
1649	Nras	1.59	96	25.7	204	40.94	
1650	AABR07028886.3	1.59	5	13.12	22	20.89	
1651	Uspl1	1.59	79	6.07	164	9.65	
1652	Atp11c	1.59	46	3.13	105	4.98	
1653	Nedd1	1.59	54	3.66	103	5.82	
1654	Ist1	1.59	183	27.7	308	44.06	
1655	Pwp1	1.59	53	7.04	92	11.19	
1656	Fam126b	1.59	48	1.55	110	2.46	
1657	Igfbp7	1.59	65	7.89	93	12.53	
1658	Mturn	1.59	13	1.84	33	2.92	
1659	RGD1304595	1.59	21	1.46	42	2.32	
1660	Ttc12	1.59	12	1.31	26	2.08	
1661	Fah	1.59	13	2.1	30	3.34	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1662	Xk	1.59	12	0.57	22	0.91	
1663	Zfp13	1.59	16	1.36	21	2.17	
1664	LOC287167	1.59	818	713.17	1754	1132.6	
1665	Pmvk	1.59	54	10.94	104	17.35	
1666	Angpt2	1.58	29	7.41	51	11.75	
1667	LOC100912399_1	1.58	14	9.95	29	15.76	
1668	Hexb	1.58	92	9.4	165	14.9	
1669	Slc24a3	1.58	74	9.62	179	15.24	
1670	Anxa4	1.58	129	19.73	270	31.24	
1671	LOC654482	1.58	28	4.68	52	7.4	
1672	Sytl4	1.58	26	2.54	56	4.03	
1673	Trmt12	1.58	17	3.79	36	6	
1674	Fbxl3	1.58	104	8.51	213	13.47	
1675	Pdlim1	1.58	139	29.54	320	46.74	
1676	Ppp1r14b	1.58	139	69.3	294	109.63	
1677	Zfp830	1.58	26	6.42	55	10.15	
1678	Derl2	1.58	41	8.14	66	12.88	
1679	Smndc1	1.58	70	8.93	150	14.11	
1680	Zfp26	1.58	65	6.54	135	10.33	
1681	Elf1	1.58	119	9.23	259	14.57	
1682	AABR07059891.1	1.58	16	11.08	24	17.49	
1683	LOC500035	1.58	10	9.79	25	15.44	
1684	Ypel4	1.58	24	1.94	50	3.06	
1685	Rps6ka2	1.58	26	1.21	46	1.91	
1686	SNORD26	1.58	9	43.45	19	68.58	
1687	Morc3	1.58	210	9.36	361	14.77	
1688	Lipa	1.58	813	84.17	1747	132.72	
1689	Kidins220	1.58	403	17.7	884	27.91	
1690	Kat2b	1.58	12	5.49	34	8.66	
1691	Cdipt	1.57	95	18.27	199	28.77	
1692	Zfp36l1	1.57	196	25.08	419	39.49	
1693	Hnrnpul2	1.57	243	32.18	493	50.66	
1694	Exog	1.57	29	1.69	63	2.65	
1695	Hr	1.57	20	1.14	41	1.79	
1696	Lgmn	1.57	41	6.93	88	10.91	
1697	Pcdh9	1.57	86	8.92	180	14.03	
1698	Foxp2	1.57	393	6.22	632	9.78	
1699	LOC100911576	1.57	5	12.26	9	19.26	
1700	Fam76a	1.57	47	5.79	106	9.1	
1701	Zfp597	1.57	11	2.87	21	4.51	
1702	Gpatch3	1.57	12	2.03	21	3.19	
1703	RGD1559955	1.57	0	8.87	1	13.93	
1704	Zfp870	1.57	13	2.17	22	3.41	
1705	Map4	1.57	611	21.92	1274	34.37	
1706	Klhl24	1.57	153	26.95	333	42.26	
1707	Atp2b1	1.57	474	32.64	1034	51.17	
1708	Ppp1r12a	1.57	475	19.65	981	30.8	
1709	LOC100911453	1.57	0	3.07	0	4.81	
1710	Nek6	1.56	52	6.6	114	10.32	
1711	Serpib9	1.56	243	45.76	508	71.61	
1712	Zfpm2	1.56	451	11.98	1094	18.74	
1713	Cited4	1.56	11	4.46	23	6.98	
1714	Il1rap	1.56	63	2.35	101	3.67	
1715	Rnf217	1.56	27	3.26	81	5.09	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1716	Snurf	1.56	3	5.43	5	8.49	
1717	Hdac7	1.56	74	6.07	161	9.48	
1718	Rbpms	1.56	61	6.72	141	10.5	
1719	RGD1305420	1.56	11	1.06	23	1.65	
1720	S100a4	1.56	22	12.2	47	19.07	
1721	Stk10	1.56	29	1.31	38	2.05	
1722	Paip2b	1.56	24	6.14	46	9.59	
1723	Flrt2	1.56	89	8.37	201	13.07	
1724	Myo18a	1.56	200	8.54	420	13.34	
1725	RGD1559896	1.56	401	46.12	832	72.04	
1726	Fbxo8	1.56	61	8.84	130	13.8	
1727	Lbh	1.56	42	26.53	105	41.42	
1728	Hibadh	1.56	154	18.84	315	29.41	
1729	Vwa5a_1	1.56	2	7.65	2	11.94	
1730	Yap1	1.56	279	42.89	551	66.93	
1731	Robo2	1.56	41	0.81	78	1.26	
1732	Zfp143	1.56	38	2.77	60	4.32	
1733	Zfp865_1	1.56	21	3.52	46	5.5	
1734	Map4k4	1.56	923	48.15	1913	75.1	
1735	Eif1ad	1.56	42	4.97	81	7.75	
1736	Klf4	1.56	71	12.55	141	19.56	
1737	Adam9	1.56	230	23.52	511	36.66	
1738	LOC100361103_2	1.56	60	115.44	124	179.9	
1739	Dock8	1.56	34	0.58	36	0.9	
1740	Hdac5	1.56	113	13.34	233	20.78	
1741	Rgmb	1.56	27	6.63	61	10.32	
1742	Rnaseh1	1.56	28	3.16	63	4.93	
1743	AABR07050399.1	1.56	0	7.21	0	11.22	
1744	Frs2	1.56	163	7.31	326	11.38	
1745	Alyref	1.56	76	19.8	153	30.82	
1746	Bod111	1.56	324	11.23	670	17.48	
1747	Dock11	1.56	63	2.7	142	4.2	
1748	Flna	1.55	4694	200.36	9802	311.56	
1749	Cops5	1.55	114	21.14	231	32.87	
1750	Rai2	1.55	241	24.85	471	38.64	
1751	Dnajc9	1.55	41	8.61	84	13.37	
1752	Cep126	1.55	37	1.14	61	1.76	
1753	LOC100910838	1.55	14	2.44	22	3.79	
1754	Lrrtm3	1.55	105	1.84	236	2.86	
1755	Mob3c	1.55	15	1.36	33	2.11	
1756	Myadm	1.55	330	41.42	687	64.21	
1757	Luzp1	1.55	140	4.08	289	6.33	
1758	Ttf1	1.55	79	3.09	146	4.78	
1759	AABR07063424.1	1.55	0	12.33	0	19.1	
1760	Itpk1	1.55	28	2.72	48	4.22	
1761	AC105693.1	1.55	17	2.9	26	4.49	
1762	Gng2	1.55	14	1.48	29	2.29	
1763	Il6r	1.55	38	2.21	70	3.42	
1764	Tmcc3	1.55	166	6	420	9.29	
1765	Ranbp9	1.55	168	12.4	310	19.2	
1766	Naca	1.55	440	22.79	896	35.27	
1767	Arid4a	1.55	58	2.87	112	4.45	
1768	Pdk1	1.55	77	13.3	132	20.57	
1769	Nr3c1_1	1.55	131	9.34	270	14.45	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1770	Bcor	1.55	125	6.61	255	10.22	
1771	Golim4	1.55	220	23.57	425	36.45	
1772	Cdc42ep1	1.55	45	5.91	94	9.14	
1773	Apc	1.55	214	7.91	429	12.23	
1774	Ctsl	1.55	908	197.45	1892	305.13	
1775	Tshz3	1.55	21	1.08	42	1.68	
1776	Cited1	1.55	18	3.26	37	5.03	
1777	Ctxn1	1.55	61	17.98	127	27.79	
1778	LOC102555377	1.55	21	2.01	54	3.11	
1779	Smad6	1.55	165	7.92	310	12.24	
1780	Zfyve21	1.55	72	4.36	105	6.73	
1781	Snn	1.54	104	11.59	215	17.89	
1782	Caap1	1.54	50	3.83	89	5.91	
1783	Cep85l	1.54	34	1.82	56	2.81	
1784	Fchsd1	1.54	41	3.18	85	4.91	
1785	Ogfod1	1.54	21	2.86	44	4.41	
1786	Mkxn3	1.54	16	3.65	33	5.63	
1787	Taf13	1.54	21	4.25	41	6.56	
1788	Tlk1_1	1.54	7	5.61	17	8.65	
1789	Serinc3	1.54	760	126.88	1612	195.53	
1790	Eif2ak2	1.54	72	4.5	122	6.93	
1791	Tp53inp1	1.54	126	29.52	294	45.47	
1792	Slc25a32	1.54	28	2.67	57	4.1	
1793	Zswim1	1.54	17	4.5	35	6.93	
1794	Malsu1	1.54	25	8.24	45	12.68	
1795	Zbtb43	1.54	25	4.07	49	6.27	
1796	Mdfic	1.54	251	20.01	533	30.8	
1797	Mras	1.54	457	37.74	949	58.05	
1798	Antxr2	1.54	69	13.08	148	20.11	
1799	Epb4114a	1.54	49	3.15	84	4.84	
1800	L3mbtl3	1.54	45	4.75	87	7.3	
1801	LOC100365810	1.54	1	15.97	2	24.55	
1802	Sertad2	1.54	56	8.66	125	13.31	
1803	Piezo2	1.54	29	0.8	51	1.23	
1804	Ehbp1	1.54	267	7.7	618	11.83	
1805	Tbc1d19	1.54	68	7.02	141	10.78	
1806	Pold4	1.53	20	8.2	39	12.58	
1807	Glipr2	1.53	28	7.48	51	11.47	
1808	Tma16	1.53	25	2.02	52	3.1	
1809	Zfp703	1.53	38	4.29	78	6.58	
1810	Sarnp	1.53	122	19.25	221	29.51	
1811	Ppp3cc	1.53	205	15.53	464	23.81	
1812	Gpn3	1.53	24	4.54	52	6.95	
1813	Psmg2	1.53	35	6.08	60	9.32	
1814	Usp12	1.53	19	6.8	44	10.42	
1815	Zcrb1	1.53	54	5.52	88	8.47	
1816	Atp6v1c1	1.53	176	16.61	375	25.45	
1817	Ankrd12	1.53	146	3.81	277	5.84	
1818	Arhgap28	1.53	51	2.61	105	3.99	
1819	Orai3	1.53	23	2.84	50	4.35	
1820	Zfp503	1.53	22	2.57	44	3.93	
1821	Csnk1g1	1.53	105	2.48	195	3.79	
1822	Plek2	1.53	26	2.74	65	4.19	
1823	Mgea5	1.53	367	21.58	673	32.98	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1824	Sorbs2	1.53	161	5.22	328	7.97	
1825	Gtf2f1	1.53	76	14.52	147	22.18	
1826	Haus6	1.53	25	2.98	56	4.56	
1827	Rpl34	1.53	363	474.58	743	724.9	
1828	Cdc42bpa	1.53	186	6.66	348	10.18	
1829	Spopl	1.53	74	9.53	130	14.56	
1830	Tbc1d16	1.53	35	3.34	68	5.09	
1831	Utp14a	1.53	32	3.34	73	5.11	
1832	Pfkfb2	1.53	60	2	125	3.05	
1833	Ska2	1.53	69	7.61	96	11.61	
1834	Tmod2	1.53	48	6.85	73	10.44	
1835	Pitpnm2	1.52	66	2.57	130	3.92	
1836	Shroom2	1.52	131	5.01	259	7.64	
1837	AABR07040690.1	1.52	28	8.07	58	12.29	
1838	Sms	1.52	46	11.63	91	17.72	
1839	Tardbp	1.52	299	36.37	597	55.43	
1840	Lpp	1.52	302	17.35	755	26.43	
1841	Ccnyl1	1.52	130	9.35	270	14.25	
1842	Pbx1	1.52	315	39.77	581	60.58	
1843	AW549877	1.52	70	4.33	126	6.6	
1844	Cables1	1.52	115	7.66	218	11.66	
1845	ENSRNOG00000043	1.52	119	5.77	239	8.78	
1846	Pmm1	1.52	35	8.48	74	12.9	
1847	Vps13a	1.52	67	2.89	133	4.41	
1848	Sfpq	1.52	362	41.62	706	63.34	
1849	Usp15	1.52	88	4.74	187	7.22	
1850	AABR07021840.1	1.52	120	10.34	259	15.73	
1851	Ammecr1l	1.52	197	14.68	392	22.33	
1852	Rhobtb3	1.52	115	6.39	239	9.72	
1853	Calhm2	1.52	64	11.86	140	18.04	
1854	Itga11	1.52	97	7.06	193	10.73	
1855	Trip10	1.52	85	12.25	156	18.62	
1856	Syde1	1.52	102	13.71	201	20.84	
1857	Rbm7	1.52	36	8.13	77	12.36	
1858	Cog3	1.52	114	8.01	182	12.17	
1859	LOC100363408	1.52	26	16.05	55	24.37	
1860	Nab2	1.52	49	4.37	93	6.63	
1861	Zcchc9	1.52	49	7.21	87	10.95	
1862	Lims1	1.52	96	13.64	208	20.71	
1863	Med1	1.52	236	12.21	451	18.53	
1864	Proser1	1.52	113	8.01	225	12.16	
1865	Prpf39	1.52	161	10.06	291	15.27	
1866	Utp11l	1.52	35	9.07	71	13.76	
1867	Zbtb12	1.52	36	5.26	72	7.98	
1868	Raph1	1.51	75	3.72	151	5.63	
1869	Agfg1	1.51	189	21.48	338	32.53	
1870	Sgms1	1.51	157	8.25	369	12.49	
1871	Col11a1	1.51	8089	367.59	16772	556.09	
1872	Pacs1	1.51	207	16.31	407	24.67	
1873	Hsd3b7	1.51	54	9.28	112	14.02	
1874	Mxra8	1.51	97	14.63	195	22.11	
1875	Acsl5	1.51	65	7.38	127	11.15	
1876	Numa1	1.51	824	36.37	1676	54.88	
1877	LOC100362366	1.51	21	93.46	32	140.92	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1878	Tmeff2	1.51	407	18.51	996	27.91	
1879	Txlna	1.51	87	9.49	159	14.3	
1880	Fam117b	1.51	343	20.27	696	30.53	
1881	Fkbp3	1.51	89	20.78	172	31.3	
1882	Gtf2a2	1.51	100	31.91	197	48.05	
1883	Usp1	1.51	77	7.16	156	10.79	
1884	Aak1	1.51	220	3.45	372	5.19	
1885	Lmnb1	1.5	87	13.15	173	19.79	
1886	Inpp5f	1.5	97	6.19	192	9.32	
1887	Aida	1.5	124	11.38	225	17.11	
1888	Igsf9	1.5	191	13.36	372	20.1	
1889	Ercc6l2	1.5	178	5.59	310	8.41	
1890	Fus	1.5	269	45.31	485	67.9	
1891	5S_rRNA_259	1.5	0	3.04	0	4.55	
1892	AABR07014275.1	1.5	0	0.35	0	0.53	
1893	Fam132b	1.5	3	0.35	11	0.53	
1894	Fancc	1.5	54	2.21	72	3.3	
1895	Hebp1	1.5	30	5.11	53	7.65	
1896	Ppapdc2	1.5	0	0.13	0	0.19	
1897	5S_rRNA_118	1.5	0	3.42	0	5.11	
1898	AABR07002119.1	1.5	0	0.54	0	0.81	
1899	AABR07002775.1	1.5	0	0.2	0	0.29	
1900	AABR07004397.1	1.5	0	1.08	0	1.61	
1901	AABR07008066.2	1.5	3	5.75	6	8.59	
1902	AABR07014239.1	1.5	0	0.82	0	1.22	
1903	AABR07014272.1	1.5	1	0.36	2	0.54	
1904	AABR07015040.1	1.5	2	0.6	4	0.9	
1905	AABR07015078.2	1.5	0	0.94	0	1.41	
1906	AABR07017236.1	1.5	2	1.02	4	1.53	
1907	AABR07021465.2	1.5	2	0.94	5	1.4	
1908	AABR07024666.1	1.5	0	1.7	0	2.54	
1909	AABR07027518.1	1.5	0	1.42	0	2.12	
1910	AABR07027722.1	1.5	0	3.42	0	5.11	
1911	AABR07027799.1	1.5	0	0.22	0	0.33	
1912	AABR07028237.1	1.5	1	0.85	0	1.28	
1913	AABR07028989.1	1.5	3	0.18	3	0.27	
1914	AABR07028995.2	1.5	0	22.22	0	33.22	
1915	AABR07030254.1	1.5	1	0.37	2	0.55	
1916	AABR07036007.1	1.5	4	9.47	6	14.15	
1917	AABR07037536.1	1.5	1	0.45	4	0.68	
1918	AABR07040855.1	1.5	6	2.52	12	3.77	
1919	AABR07044362.1	1.5	12	1.02	21	1.53	
1920	AABR07046778.1	1.5	0	2.71	1	4.06	
1921	AABR07051207.1	1.5	0	3.26	1	4.88	
1922	AABR07051332.1	1.5	0	0.42	0	0.63	
1923	AABR07053479.1	1.5	4	1.19	11	1.78	
1924	AABR07053734.1	1.5	0	0.91	0	1.36	
1925	AABR07054332.1	1.5	0	2.73	0	4.07	
1926	AABR07058914.1	1.5	1	0.23	2	0.34	
1927	AABR07061825.1	1.5	1	1.49	3	2.23	
1928	AABR07067506.1	1.5	0	0.78	0	1.17	
1929	AABR07068214.1	1.5	1	0.91	3	1.37	
1930	AABR07070704.1	1.5	0	0.44	0	0.66	
1931	AABR07072371.1	1.5	0	0.42	0	0.63	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1932	Aaed1	1.5	114	2.81	229	4.21	
1933	Abhd3	1.5	18	1.14	27	1.7	
1934	AC094902.1	1.5	0	0.35	0	0.52	
1935	AC107531.2	1.5	4	1.65	5	2.46	
1936	AC111734.1	1.5	0	6.83	0	10.21	
1937	AC117101.1	1.5	0	1.61	1	2.41	
1938	AC118833.1	1.5	1	0.98	2	1.47	
1939	AC120448.1	1.5	1	2.83	2	4.23	
1940	AC127013.1	1.5	0	0.7	1	1.05	
1941	AC142154.1	1.5	0	0.15	0	0.22	
1942	Aldh1l2	1.5	3	0.26	8	0.39	
1943	Aox4	1.5	2	0.03	12	0.05	
1944	Apold1	1.5	3	0.38	6	0.56	
1945	Arc	1.5	1	0.12	1	0.18	
1946	Arntl2	1.5	22	0.91	28	1.35	
1947	Arsi	1.5	3	0.63	6	0.94	
1948	Atp1a2	1.5	9	0.28	18	0.42	
1949	Atp8b1	1.5	2	0.06	5	0.09	
1950	Aunip	1.5	11	0.55	7	0.82	
1951	Auts2l	1.5	42	0.55	72	0.82	
1952	AY172581.7	1.5	2	10.97	4	16.41	
1953	Cacnb4	1.5	4	0.1	9	0.14	
1954	Cap2	1.5	3	0.16	6	0.24	
1955	Car13	1.5	6	0.91	11	1.37	
1956	Card9	1.5	9	0.39	10	0.59	
1957	Ccdc122	1.5	6	0.24	18	0.36	
1958	Ccdc130	1.5	40	4.15	59	6.2	
1959	Ccdc159	1.5	6	0.41	6	0.62	
1960	Ccdc65	1.5	11	1.53	21	2.29	
1961	Ceacam19	1.5	1	0.18	2	0.27	
1962	Ckmt1b	1.5	2	0.43	4	0.64	
1963	Cmss1	1.5	5	0.75	6	1.12	
1964	Col6a1	1.5	4	0.35	7	0.53	
1965	Crebl2	1.5	22	0.17	25	0.25	
1966	Dab1	1.5	14	0.06	17	0.09	
1967	Dclre1c	1.5	34	0.76	38	1.14	
1968	Dennd6a	1.5	179	10.97	334	16.4	
1969	Dgkh	1.5	12	0.36	28	0.54	
1970	Dmc1	1.5	3	0.14	5	0.21	
1971	Dnm3	1.5	30	0.18	41	0.27	
1972	Dpysl4	1.5	1	0.14	2	0.21	
1973	Dscc1	1.5	18	1.37	28	2.05	
1974	Dtna	1.5	9	0.14	12	0.22	
1975	Duxbl1	1.5	6	0.18	8	0.27	
1976	Efhd1	1.5	2	0.2	3	0.3	
1977	Eif4e1b	1.5	1	0.49	2	0.73	
1978	ENSRNOG00000054	1.5	0	0.56	0	0.84	
1979	Eps8l2	1.5	2	0.11	3	0.17	
1980	Esf1	1.5	72	6.02	145	9	
1981	Fam150a	1.5	4	1.89	15	2.82	
1982	Fam19a2	1.5	6	0.14	5	0.21	
1983	Fam83h	1.5	57	3.5	98	5.23	
1984	Fbxl7	1.5	27	2.49	57	3.73	
1985	Ffar2	1.5	1	0.36	1	0.55	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
1986	Frk	1.5	63	4.12	118	6.16	
1987	Gap43	1.5	3	0.24	2	0.37	
1988	Gcgr	1.5	2	0.19	3	0.28	
1989	Gcnt2	1.5	4	0.06	7	0.09	
1990	Glr1b	1.5	6	0.29	8	0.44	
1991	Grhl1	1.5	6	0.46	14	0.69	
1992	Grin2c	1.5	1	0.08	4	0.12	
1993	Hbb	1.5	1	0.55	2	0.82	
1994	Hbb-b1	1.5	2	0.27	2	0.4	
1995	Heph	1.5	166	13.24	336	19.79	
1996	Hmgb3_1	1.5	1	2.15	3	3.21	
1997	Hnf1b	1.5	1	0.13	2	0.2	
1998	Hnrnpa3_2	1.5	0	0.34	1	0.51	
1999	Hrasls	1.5	2	0.12	3	0.18	
2000	Ifitm10	1.5	2	0.51	10	0.77	
2001	Il12a	1.5	2	0.25	3	0.37	
2002	Il13ra2	1.5	2	0.14	5	0.21	
2003	Iqcc	1.5	16	1.15	18	1.71	
2004	Kbtbd11	1.5	4	0.35	8	0.53	
2005	Kcnc3	1.5	7	0.19	8	0.28	
2006	Kcnj11	1.5	1	0.12	2	0.18	
2007	Klhl15	1.5	25	1.25	49	1.87	
2008	Knop1_1	1.5	0	0.32	0	0.47	
2009	Lcn12	1.5	12	0.79	13	1.18	
2010	Lif	1.5	3	0.49	6	0.73	
2011	LOC100359668	1.5	0	0.66	0	0.98	
2012	LOC100359912	1.5	0	0.16	0	0.23	
2013	LOC100360821	1.5	1	0.1	2	0.15	
2014	LOC100362999	1.5	0	0.23	0	0.34	
2015	LOC100364116	1.5	0	2.97	0	4.44	
2016	LOC102549817	1.5	35	0.4	51	0.6	
2017	LOC102553119	1.5	25	2.13	38	3.18	
2018	LOC679576	1.5	1	0.94	2	1.41	
2019	LOC682408	1.5	0	0.24	1	0.36	
2020	LOC690700	1.5	3	0.71	3	1.07	
2021	LOC691083	1.5	11	0.39	17	0.58	
2022	Lrrn4	1.5	1	0.14	2	0.21	
2023	Lyz2	1.5	4	1.83	7	2.73	
2024	Mnd1	1.5	6	0.59	5	0.88	
2025	Myo5b	1.5	12	0.09	12	0.14	
2026	Ncbp2_2	1.5	0	1.54	0	2.3	
2027	Ncs1	1.5	35	2.22	67	3.33	
2028	Nell2	1.5	9	0.11	6	0.16	
2029	Neu3	1.5	5	0.63	10	0.95	
2030	Nipal1	1.5	2	0.09	4	0.13	
2031	Nlrp4	1.5	1	0.1	2	0.15	
2032	Nrip3	1.5	12	0.94	21	1.4	
2033	Nudt6	1.5	15	1.36	18	2.04	
2034	Nxf2	1.5	3	0.5	6	0.75	
2035	Oas1d	1.5	0	0.66	0	0.99	
2036	Osbp2	1.5	3	0.09	5	0.14	
2037	Pcdhb14	1.5	4	0.76	10	1.13	
2038	Pfkfb1	1.5	3	0.18	14	0.27	
2039	Plcd4	1.5	5	0.13	6	0.19	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2040	Plid5	1.5	23	0.3	25	0.45	
2041	Pold3	1.5	52	3.45	94	5.16	
2042	Pou3f4	1.5	3	0.85	6	1.27	
2043	Prrg4	1.5	1	0.19	3	0.29	
2044	Pspn	1.5	1	0.77	2	1.15	
2045	Ptger4	1.5	9	2.21	19	3.31	
2046	Ptp4a3	1.5	4	1.09	14	1.63	
2047	Ptprq	1.5	10	0.05	6	0.07	
2048	Rad51d	1.5	54	5.54	107	8.28	
2049	Rapgef4	1.5	14	0.48	37	0.71	
2050	Rasal3	1.5	1	0.09	3	0.14	
2051	Rasgrp1	1.5	6	0.3	13	0.45	
2052	Rdh14	1.5	14	1.55	26	2.32	
2053	RGD1304624	1.5	42	0.98	72	1.46	
2054	RGD1560860_2	1.5	1	0.21	1	0.31	
2055	RGD1561636	1.5	0	1.7	0	2.54	
2056	RGD1564463	1.5	4	0.21	2	0.31	
2057	Rgl3	1.5	4	0.08	3	0.12	
2058	Rhod	1.5	14	2.44	28	3.64	
2059	Ric3	1.5	28	0.18	17	0.27	
2060	Rn60_13_0801.2	1.5	2	0.38	2	0.56	
2061	Rn60_13_0841.1	1.5	1	0.96	2	1.44	
2062	Rn60_20_0058.5	1.5	0	0.9	3	1.35	
2063	Rpl31l3	1.5	1	0.96	2	1.43	
2064	RragB_1	1.5	0	1.85	0	2.76	
2065	Rtn4r	1.5	13	1.69	24	2.53	
2066	Ryr1	1.5	36	0.02	20	0.04	
2067	Samd15	1.5	4	0.19	9	0.29	
2068	Slc20a2	1.5	168	4.76	266	7.12	
2069	Slc22a1	1.5	5	0.19	2	0.29	
2070	Slc27a2	1.5	7	0.24	7	0.37	
2071	Slc38a6	1.5	28	0.94	60	1.4	
2072	snoR38_1	1.5	4	23.82	10	35.62	
2073	SNORA16_1	1.5	0	10.65	0	15.92	
2074	SNORA44_18	1.5	0	8.42	0	12.59	
2075	SNORD41	1.5	0	5.17	0	7.73	
2076	SNORD56	1.5	0	10.34	0	15.47	
2077	SNORD60	1.5	0	8.72	0	13.05	
2078	SNORD95_2	1.5	0	5.32	0	7.96	
2079	SNORND104_2	1.5	3	15.52	6	23.2	
2080	Snrpe	1.5	11	17.32	23	25.9	
2081	Sorcs1	1.5	14	0.09	14	0.14	
2082	Spaca5	1.5	5	0.65	14	0.98	
2083	Spop	1.5	116	9.62	210	14.38	
2084	Spry4	1.5	8	0.46	14	0.68	
2085	Sstr1	1.5	1	0.09	2	0.14	
2086	Stard3nl	1.5	69	12.69	124	18.97	
2087	Stau2	1.5	80	6.13	140	9.17	
2088	Stk26	1.5	2	0.11	2	0.16	
2089	Syce2	1.5	14	0.48	12	0.72	
2090	Syne3	1.5	23	0.83	39	1.24	
2091	Tmem106a	1.5	12	1.83	24	2.73	
2092	Tmem74	1.5	1	0.39	2	0.59	
2093	Tmem81	1.5	7	0.89	12	1.33	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2094	Tmod3	1.5	110	20.33	234	30.4	
2095	Tmprss9	1.5	3	0.1	7	0.15	
2096	Tprkb_1	1.5	3	2.23	7	3.33	
2097	Trhde	1.5	14	0.11	17	0.16	
2098	Ttc30a1	1.5	1	0.3	4	0.44	
2099	Ttll3	1.5	15	0.16	26	0.24	
2100	Ube2ql1	1.5	15	1.5	31	2.24	
2101	Ube2t	1.5	5	0.59	2	0.88	
2102	Utf1	1.5	3	1.05	6	1.58	
2103	Vtcn1	1.5	2	0.08	3	0.12	
2104	Wbscr17	1.5	22	0.38	33	0.57	
2105	Wee1	1.5	34	3.21	74	4.79	
2106	Wee2	1.5	12	0.22	21	0.32	
2107	Wisp1	1.5	2	0.07	2	0.11	
2108	Zdhhc14	1.5	14	0.24	26	0.36	
2109	Zfp182	1.5	14	2.13	30	3.19	
2110	Zfp300	1.5	3	0.49	6	0.73	
2111	Zfp551	1.5	6	0.5	12	0.75	
2112	Zfp628	1.5	37	3.55	68	5.31	
2113	Zfp93	1.5	3	0.17	4	0.26	
2114	Zkscan4	1.5	8	2.44	15	3.65	
2115	AABR07002910.1	1.5	3	0.34	6	0.51	
2116	AABR07003187.2	1.5	1	0.33	1	0.49	
2117	AABR07005779.3	1.5	1	0.25	2	0.38	
2118	AABR07006889.1	1.5	1	0.18	1	0.26	
2119	AABR07012054.1	1.5	4	1.79	8	2.67	
2120	AABR07020537.1	1.5	1	0.07	2	0.11	
2121	AABR07024457.1	1.5	4	0.41	10	0.61	
2122	AABR07026359.1	1.5	0	0.39	0	0.58	
2123	AABR07041724.1	1.5	1	1.72	2	2.58	
2124	AABR07049038.1	1.5	3	2.06	4	3.08	
2125	AABR07054983.2	1.5	3	0.85	6	1.27	
2126	AABR07055191.1	1.5	16	0.43	34	0.65	
2127	AABR07056330.1	1.5	2	0.34	2	0.5	
2128	AABR07071101.1	1.5	1	0.36	2	0.54	
2129	AC133270.1	1.5	29	12.26	51	18.33	
2130	Acyp1	1.5	6	2.06	19	3.08	
2131	Adam12	1.5	15	0.12	14	0.18	
2132	Aifm3	1.5	2	0.15	4	0.23	
2133	Alx4	1.5	8	0.21	10	0.31	
2134	Amt	1.5	7	0.6	9	0.89	
2135	Anlnl1	1.5	0	0.12	0	0.19	
2136	Armc2	1.5	8	0.29	14	0.44	
2137	Arx	1.5	3	0.38	7	0.57	
2138	Atl3	1.5	145	17.02	280	25.45	
2139	Btc	1.5	5	0.44	8	0.66	
2140	Btnl5_1	1.5	1	0.17	1	0.25	
2141	Btnl7_2	1.5	0	0.17	0	0.26	
2142	Ccdc167	1.5	17	1.19	23	1.78	
2143	Ccdc89	1.5	0	0.65	0	0.97	
2144	Cd83	1.5	10	1.2	18	1.79	
2145	Cdk5r1	1.5	1	0.3	2	0.45	
2146	Celf3	1.5	8	0.25	9	0.38	
2147	Chst9	1.5	8	0.41	15	0.61	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2148	Clnn	1.5	10	0.15	11	0.23	
2149	Col15a1	1.5	0	0.09	0	0.14	
2150	Colec10	1.5	2	0.16	9	0.24	
2151	Cpm	1.5	5	0.13	10	0.2	
2152	Crb1	1.5	6	0.08	8	0.12	
2153	Ddn	1.5	1	0.1	2	0.15	
2154	Dnmt3b	1.5	13	0.44	22	0.66	
2155	Ebf1	1.5	13	0.11	9	0.16	
2156	Esrp2	1.5	3	0.27	5	0.41	
2157	Exosc6	1.5	4	1.77	8	2.64	
2158	Fam122a	1.5	0	0.28	0	0.41	
2159	Fam178a	1.5	212	8	379	11.97	
2160	Fam189a1	1.5	70	0.23	99	0.35	
2161	Fau	1.5	0	0.9	0	1.35	
2162	Fbxw10	1.5	3	0.12	3	0.17	
2163	Fez1	1.5	5	0.22	4	0.32	
2164	Fosb	1.5	2	0.19	4	0.29	
2165	Fscn3	1.5	3	0.2	2	0.3	
2166	Fsip2	1.5	3	0.02	3	0.03	
2167	Glt8d2	1.5	5	0.69	6	1.03	
2168	Gmpr	1.5	13	1.52	21	2.27	
2169	Gstm6l_1	1.5	1	0.3	2	0.45	
2170	Hmgb2l1	1.5	0	1.14	0	1.71	
2171	Hmgn5	1.5	0	0.55	0	0.83	
2172	Hspb2	1.5	1	0.66	4	0.99	
2173	Il17rd	1.5	5	0.22	15	0.33	
2174	Il1rl1	1.5	2	0.1	2	0.15	
2175	Iqcb1	1.5	38	3.31	90	4.95	
2176	Iqcg	1.5	94	0.12	137	0.19	
2177	Ilgam	1.5	1144	0.05	1132	0.07	
2178	Kcnd3	1.5	24	0.74	63	1.11	
2179	Lcn2	1.5	2	0.81	4	1.22	
2180	LOC100302465	1.5	6	0.12	7	0.18	
2181	LOC100909911_2	1.5	0	1.01	0	1.5	
2182	LOC100910531	1.5	24	1.22	53	1.83	
2183	LOC100912024	1.5	0	5.56	0	8.31	
2184	LOC24906	1.5	1	0.19	2	0.29	
2185	LOC498368	1.5	2	0.28	4	0.42	
2186	LOC501406	1.5	4	1.2	11	1.8	
2187	LOC686807	1.5	1	1.27	2	1.91	
2188	LOC688765	1.5	11	2.1	22	3.14	
2189	LOC689986	1.5	4	0.62	7	0.92	
2190	LOC691113	1.5	2	0.81	4	1.21	
2191	Loxl1	1.5	3	0.26	5	0.39	
2192	Ltbp4	1.5	6	0.34	10	0.51	
2193	Lzts1	1.5	8	0.51	18	0.76	
2194	Mafa	1.5	1	0.33	2	0.5	
2195	Masp2	1.5	59	1.61	81	2.41	
2196	Mboat7	1.5	0	0.25	0	0.38	
2197	Mettl2b	1.5	63	2.46	110	3.67	
2198	Mff_1	1.5	0	1.14	0	1.7	
2199	MGC105649	1.5	2	0.31	2	0.47	
2200	MGC109340_2	1.5	0	1.33	0	1.99	
2201	Mrps23	1.5	58	12.03	99	17.99	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2202	Msantd1	1.5	2	0.07	4	0.11	
2203	N4bp2l1	1.5	16	0.85	14	1.27	
2204	Nadk2	1.5	53	2.96	88	4.42	
2205	Nfkbiz	1.5	14	0.63	24	0.94	
2206	Nipal4	1.5	1	0.11	2	0.17	
2207	Nlrp4b	1.5	1	0.25	1	0.37	
2208	Nqo2	1.5	4	1.06	14	1.58	
2209	Nyap2	1.5	5	0.12	8	0.19	
2210	Pagr1	1.5	10	4.75	15	7.1	
2211	Pcdhb15	1.5	1	0.15	2	0.23	
2212	Pcdhb21	1.5	1	0.12	2	0.19	
2213	Pdcd2l	1.5	25	4.99	49	7.46	
2214	Pgr	1.5	9	0.12	15	0.18	
2215	Plekha4	1.5	6	0.36	10	0.54	
2216	Plscr1	1.5	6	0.41	11	0.62	
2217	Pnlcd1	1.5	6	0.17	5	0.25	
2218	Ppm1e	1.5	22	0.4	48	0.59	
2219	Ppp1r14a	1.5	6	1.46	8	2.18	
2220	Rab11fip2	1.5	30	2.69	44	4.03	
2221	Rab32	1.5	21	2.02	38	3.02	
2222	Rala	1.5	44	12.65	95	18.92	
2223	Rd3	1.5	1	0.23	3	0.34	
2224	Ret	1.5	3	0.13	5	0.19	
2225	RGD1311558	1.5	39	3.65	75	5.46	
2226	RGD1312005	1.5	7	1.2	14	1.8	
2227	RGD1559864	1.5	4	0.19	5	0.29	
2228	RGD1560831	1.5	2	0.99	4	1.49	
2229	RGD1561551	1.5	1	0.39	2	0.58	
2230	RGD1562381	1.5	1	0.86	1	1.29	
2231	RGD1565472	1.5	0	0.75	0	1.12	
2232	RGD1566369	1.5	0	0.58	0	0.86	
2233	Rhox5	1.5	0	0.57	0	0.85	
2234	Rn60_14_0866.3	1.5	0	0.91	2	1.35	
2235	Rn60_16_0001.1	1.5	1	0.43	2	0.64	
2236	Rpl39_3	1.5	0	9.28	0	13.88	
2237	Rpl39_6	1.5	0	9.28	0	13.88	
2238	Rps15a2	1.5	0	0.92	1	1.38	
2239	SCARNA16_4	1.5	1	1.97	2	2.94	
2240	Scn3a	1.5	2	0.11	3	0.16	
2241	Slc12a8	1.5	6	0.14	12	0.21	
2242	Slc24a2	1.5	8	0.04	11	0.06	
2243	Slc35b3	1.5	77	3.6	107	5.39	
2244	Slc4a10	1.5	9	0.06	9	0.09	
2245	Slc7a3	1.5	1	0.12	2	0.18	
2246	snoR38_2	1.5	1	4.76	2	7.12	
2247	SNORA43_6	1.5	15	59.89	36	89.55	
2248	SNORA44_25	1.5	0	5.61	0	8.39	
2249	SNORD14_2	1.5	0	8.52	0	12.74	
2250	SNORD77_1	1.5	0	23.51	0	35.15	
2251	SNORD88_2	1.5	1	3.98	2	5.95	
2252	Sphkap	1.5	3	0.1	8	0.15	
2253	Ssmem1	1.5	4	0.21	4	0.32	
2254	Stard6	1.5	8	0.51	14	0.76	
2255	Tesc	1.5	6	0.56	16	0.84	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2256	Tg	1.5	4	0.04	3	0.06	
2257	Tjp3	1.5	6	0.16	7	0.24	
2258	Tmem255b	1.5	1	0.36	3	0.54	
2259	Tmem45a	1.5	0	0.9	1	1.34	
2260	Tspan8	1.5	2	0.31	4	0.46	
2261	Tstd1	1.5	1	0.9	6	1.35	
2262	Vps37a	1.5	79	9.71	144	14.52	
2263	Zmym5	1.5	88	11.9	167	17.79	
2264	Sept7	1.49	118	20.73	224	30.88	
2265	Bmp2k	1.49	163	13.51	300	20.12	
2266	Kif13b	1.49	180	7.08	344	10.53	
2267	Bcor1	1.49	115	5.45	222	8.1	
2268	Iqgap1	1.49	572	31.72	1119	47.16	
2269	Iws1	1.49	118	9.49	195	14.1	
2270	Cyld	1.48	69	7.12	134	10.56	
2271	Phf14	1.48	234	9.6	419	14.24	
2272	Plekhg2	1.48	152	10.04	300	14.91	
2273	Map2	1.48	94	4	200	5.93	
2274	Krcc1	1.48	97	14.59	189	21.65	
2275	Abca9	1.48	75	4.83	169	7.16	
2276	Col4a5	1.48	470	24.42	947	36.22	
2277	Epas1	1.48	1053	74.81	2094	110.86	
2278	Flnb	1.48	520	18.95	1060	28.07	
2279	Hmox2	1.48	88	9.68	179	14.33	
2280	Cdkn2aip	1.48	53	8.19	106	12.13	
2281	Sestd1	1.48	144	13.57	278	20.1	
2282	Trio	1.48	363	10.99	677	16.25	
2283	Frg1	1.48	50	14.64	78	21.65	
2284	AABR07002779.1	1.48	58	26.55	70	39.25	
2285	Zfp322a	1.48	63	5.08	116	7.51	
2286	Avl9	1.48	55	6.38	129	9.43	
2287	Myo9a	1.48	178	5.45	336	8.05	
2288	AABR07028981.1	1.48	0	10.4	0	15.35	
2289	Jam3	1.48	115	15.4	209	22.74	
2290	AABR07027575.1	1.48	84	75.07	158	110.83	
2291	Ccdc25	1.48	47	6.59	104	9.73	
2292	Twistnb	1.48	40	3.97	77	5.86	
2293	Rpia	1.48	43	7.79	97	11.5	
2294	Frmf6	1.48	88	6.03	176	8.9	
2295	Ndufa5	1.48	50	24.54	94	36.19	
2296	Epc2	1.47	67	6.97	134	10.28	
2297	Ubal1_2	1.47	26	9.63	43	14.19	
2298	Vat1	1.47	590	76.82	1231	113.21	
2299	Ktn1	1.47	281	15.4	543	22.69	
2300	Cinp	1.47	70	8.37	123	12.34	
2301	Lrch3	1.47	31	5.17	61	7.62	
2302	Akap1	1.47	114	9.84	217	14.49	
2303	Snrnp70	1.47	512	38.94	909	57.33	
2304	Mex3a	1.47	33	9.17	74	13.5	
2305	Rnf219	1.47	38	3.07	79	4.52	
2306	Scyl3	1.47	57	3.91	87	5.75	
2307	Upf2	1.47	114	6.07	201	8.93	
2308	Stim2	1.47	147	10.14	287	14.92	
2309	Map2k4	1.47	69	10.06	133	14.8	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2310	Rpl39_7	1.47	18	220.08	19	323.77	
2311	Ptma_2	1.47	11	14.65	16	21.56	
2312	Rcn1	1.47	159	44.78	350	65.84	
2313	Ankrd11	1.47	979	34.62	1925	50.89	
2314	Vldlr	1.47	276	27.76	535	40.8	
2315	Kcnk2	1.47	89	5.67	185	8.34	
2316	LOC100361830	1.47	123	21.9	237	32.16	
2317	Pqlc2	1.47	37	1.87	62	2.75	
2318	Taok3	1.47	51	3.49	110	5.13	
2319	Cpne3	1.47	128	14.34	241	21.05	
2320	Sumo1	1.47	173	43.8	330	64.28	
2321	Frmf3	1.47	230	4.83	342	7.08	
2322	Rbms3	1.47	421	13.11	926	19.24	
2323	Atxn3	1.47	58	3.07	115	4.5	
2324	Hs1bp3	1.47	58	6.2	117	9.09	
2325	Rab11fip3	1.47	123	9.3	248	13.63	
2326	Slc31a1	1.47	74	12.78	121	18.73	
2327	Setx	1.46	227	7.66	450	11.22	
2328	Npap60_2	1.46	95	11.63	190	17.02	
2329	Ift74	1.46	35	4.12	82	6.04	
2330	Tdrd3	1.46	73	4.58	129	6.7	
2331	Fam118a	1.46	34	3.02	62	4.42	
2332	Actr2	1.46	150	25.15	274	36.79	
2333	Btf3	1.46	140	136.98	256	200.39	
2334	Hook1	1.46	33	1.52	58	2.22	
2335	Anapc10	1.46	39	4.5	62	6.58	
2336	Wnk3	1.46	30	1.47	58	2.14	
2337	Sipa1	1.46	23	2.31	46	3.37	
2338	Kctd18	1.46	121	5.34	225	7.8	
2339	Dek	1.46	115	12.21	201	17.83	
2340	Mecp2	1.46	75	8.78	145	12.82	
2341	LOC500028	1.46	76	8.86	143	12.93	
2342	Etaa1l1	1.46	42	4.66	82	6.81	
2343	Xpc	1.46	165	10.36	274	15.13	
2344	Slc35f5	1.46	95	8.27	176	12.06	
2345	Exoc1	1.46	137	8.7	244	12.69	
2346	Bbx	1.46	151	11.38	273	16.6	
2347	Cd82	1.46	22	4	46	5.83	
2348	Med21	1.46	33	9.12	49	13.3	
2349	Nanp	1.46	28	5.47	62	7.97	
2350	Cstf3	1.46	93	4.71	174	6.86	
2351	Snx4	1.46	229	17.48	443	25.47	
2352	Tro	1.46	106	7.98	183	11.62	
2353	Osbpl11	1.46	150	10.31	304	15.02	
2354	Cltb	1.46	47	13.14	93	19.13	
2355	AABR07024972.1	1.46	19	8.37	37	12.18	
2356	Abhd1	1.46	13	1.34	19	1.95	
2357	Ppm1d	1.46	85	7.09	177	10.33	
2358	Pragmin	1.46	44	2.89	86	4.21	
2359	Fam8a1	1.46	33	5.96	60	8.67	
2360	Sh3bp4	1.46	266	17.43	547	25.36	
2361	Srgap2	1.46	164	7.78	317	11.32	
2362	Map1s	1.46	101	7.95	210	11.57	
2363	Dpy19l1	1.45	228	15.68	438	22.81	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2364	Dis3	1.45	69	4.93	124	7.16	
2365	Fam46a	1.45	55	6.38	109	9.27	
2366	Syncrip	1.45	308	16.79	540	24.41	
2367	Abcc5	1.45	60	4.27	106	6.2	
2368	Cep57	1.45	52	5.07	92	7.36	
2369	Rbm8a	1.45	88	21.2	176	30.79	
2370	Hipk2	1.45	187	10.37	383	15.07	
2371	Smek2	1.45	181	11.27	344	16.36	
2372	Psmb7	1.45	266	51.24	508	74.38	
2373	Adgra2	1.45	187	15.35	411	22.27	
2374	Recql4	1.45	11	1.02	15	1.48	
2375	AABR07058886.1	1.45	53	14.07	102	20.41	
2376	Ift88	1.45	82	3.83	127	5.56	
2377	Shroom4	1.45	125	4.28	254	6.2	
2378	Smc3	1.45	199	13.26	361	19.23	
2379	Col12a1	1.45	273	8.37	541	12.13	
2380	Chmp2a	1.45	57	19.35	109	28.04	
2381	Hecw1	1.45	135	3.03	251	4.39	
2382	Trpm7	1.45	236	10.26	416	14.87	
2383	Bbs7	1.45	54	4.01	100	5.81	
2384	Slc4a4	1.45	31	1.25	64	1.82	
2385	Ddx42	1.45	413	28.66	757	41.46	
2386	Vps4b	1.45	129	15.52	257	22.45	
2387	Cobl	1.45	79	2.96	137	4.28	
2388	Ift43	1.45	42	6.51	80	9.41	
2389	Ccser2	1.45	70	3.69	109	5.34	
2390	Snx24	1.45	53	2.48	124	3.59	
2391	Flot1	1.44	118	15.75	224	22.76	
2392	Rbm17	1.44	92	17.77	167	25.67	
2393	Utp6	1.44	53	8.91	109	12.87	
2394	Nek4	1.44	38	3.67	71	5.3	
2395	Pi4k2b	1.44	62	6.12	102	8.84	
2396	Nolc1	1.44	166	15.95	316	23.02	
2397	Athl1	1.44	50	6.72	94	9.7	
2398	Trak2	1.44	267	12.89	523	18.61	
2399	Chm	1.44	55	4.45	107	6.42	
2400	Ywhah	1.44	339	55.2	637	79.63	
2401	Cdca7	1.44	13	2.18	29	3.14	
2402	Skap2	1.44	23	3.11	51	4.49	
2403	Tbk1	1.44	86	5.09	179	7.34	
2404	Shpk	1.44	19	1.69	34	2.44	
2405	Snx25	1.44	34	3.64	70	5.25	
2406	Zfyve16	1.44	120	6.11	216	8.81	
2407	Rhoa	1.44	822	185.15	1593	266.93	
2408	Zfp655	1.44	109	11.32	209	16.32	
2409	Ctif	1.44	263	10.28	529	14.81	
2410	Zdhhc20	1.44	120	12.69	221	18.29	
2411	Dcaf6	1.44	206	14.75	349	21.25	
2412	Eea1	1.44	73	3.07	154	4.42	
2413	Usp13	1.44	98	3.94	196	5.67	
2414	Pja2	1.44	299	22.45	578	32.33	
2415	Cdk6	1.44	100	6.53	164	9.41	
2416	Dpm1	1.44	54	4.26	122	6.13	
2417	Tmsb4x	1.44	675	463.86	1350	667.61	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2418	LOC100912163	1.44	7	2.72	7	3.91	
2419	Nfxl1	1.44	58	3.81	97	5.49	
2420	RGD1306072	1.44	91	5.39	149	7.75	
2421	Fam60a_1	1.44	68	11.5	134	16.55	
2422	Pcsk5	1.44	747	35.99	1497	51.75	
2423	AABR07058267.1	1.44	13	10.06	25	14.46	
2424	Dzip1l	1.44	51	3.66	97	5.26	
2425	LOC100912585	1.44	0	0.98	0	1.4	
2426	Carf	1.44	39	2.57	62	3.69	
2427	Gch1	1.44	46	6.35	63	9.13	
2428	Vsig10	1.44	385	39.43	813	56.68	
2429	LOC100910882	1.44	51	63.03	98	90.6	
2430	Gapdh-ps2	1.44	36	89.35	42	128.38	
2431	AABR07033564.1	1.44	33	3.38	61	4.86	
2432	Sart3	1.44	130	8.52	206	12.24	
2433	Tsc1	1.44	119	8.45	203	12.14	
2434	Exoc8	1.44	38	5.42	73	7.79	
2435	Spred1	1.44	46	5.54	82	7.95	
2436	Wdr60	1.44	52	2.6	77	3.73	
2437	Tjp1	1.44	459	22.87	887	32.83	
2438	Ryr2	1.44	138	2.13	275	3.05	
2439	Hnrnpa0	1.43	98	39.7	190	56.96	
2440	Dhx36	1.43	189	9.46	356	13.57	
2441	Fam160a2	1.43	108	4.71	157	6.75	
2442	Tyro3	1.43	28	2.33	48	3.34	
2443	Bag1	1.43	117	23.25	217	33.32	
2444	Mob3b	1.43	19	1.91	69	2.74	
2445	Rassf7	1.43	12	3.07	23	4.41	
2446	Tirap	1.43	18	5.77	25	8.27	
2447	Tdrp	1.43	13	1.64	25	2.35	
2448	Ppp1r12b	1.43	484	13.45	851	19.26	
2449	Pdcl3	1.43	113	20.02	216	28.66	
2450	Hsd1l	1.43	51	9.24	94	13.23	
2451	Coro1c	1.43	185	17.4	346	24.91	
2452	Ak6	1.43	16	17.35	37	24.83	
2453	LOC102553002	1.43	63	3.9	92	5.58	
2454	Luc7l2	1.43	442	20.65	776	29.55	
2455	Wbp1	1.43	0	16.06	1	22.97	
2456	Arnt2	1.43	134	6.75	273	9.66	
2457	Krit1	1.43	106	6.9	198	9.87	
2458	Pus1	1.43	42	4.67	58	6.68	
2459	Picalm	1.43	399	41.96	733	60.01	
2460	Psme4	1.43	639	27.32	1225	39.07	
2461	Bcar1	1.43	288	29.63	549	42.36	
2462	Lsm4	1.43	45	13.51	81	19.31	
2463	AC115158.1	1.43	21	6.35	50	9.07	
2464	2610015P09Rik	1.43	46	1.19	68	1.7	
2465	E2f2	1.43	14	0.84	35	1.2	
2466	Fbxo3	1.43	199	10.99	376	15.69	
2467	Uvrag	1.43	210	9.5	410	13.56	
2468	Dmd	1.43	321	5.11	687	7.29	
2469	Zbtb38	1.43	76	6.87	145	9.8	
2470	Golga3	1.43	48	8.93	77	12.73	
2471	Smc1a	1.43	278	19.1	494	27.24	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2472	Mcam	1.43	187	22.95	355	32.73	
2473	Eif2a	1.43	108	12.25	187	17.46	
2474	Dach1	1.43	119	7.27	212	10.37	
2475	Zfp786	1.43	34	2.72	65	3.88	
2476	Taf1d	1.43	73	6.88	123	9.8	
2477	Zfp451	1.43	287	5.89	434	8.4	
2478	Asph	1.43	226	6.07	471	8.64	
2479	Rps6kc1	1.42	121	4.85	220	6.91	
2480	Stx12	1.42	169	19.02	313	27.09	
2481	Stk38l	1.42	180	12.4	353	17.66	
2482	RGD1309362	1.42	97	29.5	192	42.02	
2483	Arl5b	1.42	75	4.31	126	6.14	
2484	Ppp4r2	1.42	216	12.83	415	18.27	
2485	Gltscr1	1.42	97	5.45	189	7.75	
2486	Hip1	1.42	325	12.71	657	18.09	
2487	Slc17a5	1.42	43	3.82	84	5.43	
2488	Trim26	1.42	141	8.22	254	11.69	
2489	RGD1560108	1.42	122	9.99	234	14.2	
2490	Qser1	1.42	389	13.83	756	19.66	
2491	Sh3glb1	1.42	420	25.02	804	35.55	
2492	Vim	1.42	2114	407.89	4037	579.57	
2493	Wls	1.42	834	45.15	1540	64.15	
2494	Ddx52	1.42	42	3.49	67	4.96	
2495	Lym2	1.42	20	4.68	37	6.64	
2496	Znhit2	1.42	10	2.82	19	4.01	
2497	Asb1	1.42	12	1.79	23	2.55	
2498	Gbbp1	1.42	180	14.24	318	20.23	
2499	Hnrnpa1	1.42	406	98.51	645	139.93	
2500	lpmk	1.42	68	3.36	117	4.77	
2501	Zfp933	1.42	19	4.35	37	6.19	
2502	Rn60_19_0706.2	1.42	4	5.16	11	7.33	
2503	Eif4a2	1.42	557	72.13	1025	102.37	
2504	Rwdd1	1.42	46	12.22	88	17.33	
2505	Tns3	1.42	640	27.05	1241	38.37	
2506	Gdap2	1.42	39	3.87	82	5.49	
2507	Mid2	1.42	40	1.84	75	2.61	
2508	Glce	1.42	141	10.35	270	14.68	
2509	Tbc1d15	1.42	215	19.43	386	27.55	
2510	Odc1	1.42	410	39.98	784	56.65	
2511	Med15	1.42	384	22.22	682	31.47	
2512	Ttc28	1.42	383	10.41	717	14.75	
2513	Zbtb1	1.42	122	7.47	197	10.58	
2514	Gzf1	1.42	86	6.35	157	8.99	
2515	Dyrk1a	1.41	170	15.44	298	21.84	
2516	Rhob	1.41	248	41.78	471	59.12	
2517	Etl4	1.41	487	14.95	1006	21.14	
2518	Arl13b	1.41	98	4.62	210	6.53	
2519	Dennd4a	1.41	64	1.97	106	2.78	
2520	Sbds	1.41	63	11.95	121	16.89	
2521	Mtdh	1.41	110	17.85	189	25.24	
2522	Kifap3	1.41	160	11.09	305	15.68	
2523	Bcl6	1.41	139	12.61	274	17.81	
2524	Ago4	1.41	30	1.74	55	2.46	
2525	Bicd1	1.41	119	2.36	233	3.34	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2526	Dcaf17	1.41	34	3.25	51	4.58	
2527	Khdrbs3	1.41	46	7.76	98	10.96	
2528	Lrrcc1	1.41	55	2.77	102	3.91	
2529	Mrpl19	1.41	27	8.36	53	11.81	
2530	Rab39a	1.41	14	0.7	21	0.99	
2531	Slc43a1	1.41	26	3.58	42	5.05	
2532	Dagla	1.41	13	0.59	24	0.83	
2533	mrpl24	1.41	82	10.22	127	14.43	
2534	Ptgis	1.41	25	3.84	49	5.43	
2535	SNORD36_7	1.41	0	47.23	0	66.69	
2536	Wtip	1.41	40	5.7	70	8.05	
2537	RGD1565616	1.41	351	12.14	603	17.13	
2538	Exoc6b	1.41	255	7.16	433	10.11	
2539	Sdc2	1.41	306	33.76	589	47.64	
2540	Fnta	1.41	126	22.82	224	32.19	
2541	Evc2	1.41	59	3.12	119	4.4	
2542	Kif3a	1.41	48	3.27	84	4.61	
2543	Ublcp1	1.41	134	15.16	222	21.36	
2544	Pcmt1	1.41	184	10	370	14.09	
2545	Uchl1	1.41	158	53.09	308	74.8	
2546	Cgn	1.41	31	1.85	63	2.6	
2547	Gart	1.41	148	13.86	262	19.53	
2548	Phf20	1.41	118	10.27	199	14.46	
2549	Syf2	1.41	105	24.54	194	34.54	
2550	Atf7	1.41	165	11.08	306	15.59	
2551	Crlf2	1.41	21	4.86	37	6.84	
2552	Med29	1.41	42	9.49	82	13.36	
2553	Nrde2	1.41	48	3.45	79	4.85	
2554	Slc8b1	1.41	29	2.31	59	3.25	
2555	Zfc3h1	1.41	215	9.25	389	13.02	
2556	Slk	1.41	110	8.5	205	11.96	
2557	Lasp1	1.41	711	68.81	1362	96.78	
2558	Kihl5	1.41	57	4.42	109	6.21	
2559	Rpap2	1.41	70	4.67	119	6.57	
2560	Rpap3	1.41	148	13.6	275	19.13	
2561	Sfxn3	1.4	323	41.97	616	58.95	
2562	Klf7_1	1.4	29	3.63	57	5.09	
2563	Acsl1	1.4	92	7.39	182	10.38	
2564	Irf2	1.4	91	5.62	163	7.89	
2565	Isca2	1.4	42	25.77	82	36.16	
2566	Etv3	1.4	83	5.07	154	7.11	
2567	Rn60_X_0752.3	1.4	111	44.34	195	62.19	
2568	Cspg5	1.4	36	6.75	65	9.46	
2569	Ctf1	1.4	8	2.07	17	2.9	
2570	Larp1b	1.4	40	2.99	75	4.19	
2571	LOC100909544	1.4	0	1.71	1	2.4	
2572	Taf12	1.4	28	3.36	56	4.7	
2573	Taf1b	1.4	34	1.41	31	1.98	
2574	Zfp113	1.4	29	4.4	50	6.17	
2575	AABR07059168.2	1.4	30	3.92	69	5.5	
2576	Ankrd42	1.4	45	3.14	91	4.4	
2577	Ap1s3	1.4	69	4.57	115	6.41	
2578	Cnot6l	1.4	162	11.02	304	15.45	
2579	Ildr2	1.4	16	1.46	27	2.05	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2580	Leng1	1.4	12	1.57	19	2.2	
2581	Nat8l	1.4	8	0.88	15	1.24	
2582	Pctp	1.4	12	1.51	23	2.12	
2583	Ppp2r3a	1.4	166	3.99	257	5.59	
2584	Scara3	1.4	11	0.86	16	1.2	
2585	Zmat3	1.4	23	4.52	46	6.33	
2586	Rnf5	1.4	17	21.49	23	30.1	
2587	Pogk	1.4	261	12.52	483	17.52	
2588	Rtn4	1.4	477	33.19	865	46.46	
2589	Yes1	1.4	153	6.3	259	8.82	
2590	Ptpn12	1.4	141	12.24	271	17.13	
2591	Akr1c19	1.4	81	8.28	132	11.59	
2592	Kif15	1.4	42	2.35	75	3.28	
2593	Rab3gap1	1.4	153	19.23	280	26.9	
2594	Rbm6	1.4	271	12.75	456	17.82	
2595	ldh1	1.4	301	49.63	569	69.4	
2596	Dmtf1	1.4	186	11.79	307	16.47	
2597	LOC100362432	1.4	55	15.14	93	21.16	
2598	Crk	1.4	142	24.27	256	33.92	
2599	Dbn1	1.4	342	40.85	633	57.07	
2600	Fam188a	1.4	79	5.93	126	8.28	
2601	Tcf20	1.4	147	6.74	279	9.41	
2602	Prrg1	1.4	127	8.94	238	12.47	
2603	AABR07015078.1	1.4	0	13.21	0	18.44	
2604	Gan	1.4	24	1.99	42	2.78	
2605	Mtx3	1.4	34	4.72	67	6.59	
2606	AY172581.10	1.4	15	79.87	28	111.46	
2607	Traf3ip1	1.4	44	2.25	71	3.14	
2608	Bcl11a	1.39	205	7.74	320	10.79	
2609	Dopey1	1.39	146	3.86	239	5.38	
2610	Exoc2	1.39	172	18.64	340	26	
2611	Srp54a	1.39	102	13.86	188	19.34	
2612	Urgcp	1.39	111	7.01	196	9.78	
2613	RGD1304728	1.39	78	4.19	134	5.84	
2614	Rps15a	1.39	66	170.44	66	237.63	
2615	Klhdc2	1.39	97	28.47	202	39.68	
2616	LOC100362658	1.39	24	3	42	4.18	
2617	Rab11a	1.39	134	19.85	229	27.64	
2618	Arglu1	1.39	209	21.5	383	29.94	
2619	Helz	1.39	225	9.76	413	13.59	
2620	Arhgef5	1.39	37	2.14	69	2.98	
2621	Tmcc2	1.39	45	2.85	84	3.97	
2622	Adprhl2	1.39	63	12.61	117	17.55	
2623	Bahd1	1.39	92	7.27	166	10.12	
2624	Actr3	1.39	396	53	735	73.77	
2625	Ahr	1.39	93	6.05	176	8.42	
2626	Faf1	1.39	165	16.9	268	23.51	
2627	Prkd1	1.39	129	4.6	201	6.4	
2628	Tll1	1.39	68	3.83	133	5.33	
2629	Zfp445	1.39	133	13.2	267	18.36	
2630	Mbd2	1.39	105	14.22	161	19.76	
2631	Hipk3	1.39	336	25.62	618	35.6	
2632	Fam25a	1.39	9	6.34	15	8.8	
2633	AABR07065420.1	1.39	12	1.74	24	2.41	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2634	Fez2	1.39	132	14.7	243	20.41	
2635	LOC100909998	1.39	7	0.67	13	0.93	
2636	Myh15	1.39	14	0.44	20	0.61	
2637	Nsmce2	1.39	115	8.55	167	11.87	
2638	Plekha2	1.39	155	8.67	304	12.04	
2639	Rpf2	1.39	34	6.08	61	8.45	
2640	Shmt1	1.39	22	1.24	22	1.72	
2641	Slc25a37	1.39	16	1.61	31	2.23	
2642	Spata7	1.39	56	2.53	101	3.52	
2643	Usp53	1.39	79	3.73	144	5.19	
2644	Smarca1	1.39	50	3.21	89	4.46	
2645	Ptpn21	1.39	157	8.62	296	11.96	
2646	Sbf2	1.39	387	13.57	800	18.83	
2647	Cbx2	1.39	87	8.01	159	11.12	
2648	Cobll1	1.39	127	6.12	210	8.48	
2649	AABR07042359.1	1.39	13	208.15	14	288.67	
2650	Ssh1	1.39	127	6.46	188	8.95	
2651	Fbxo38	1.39	212	14.8	399	20.52	
2652	Aes	1.39	123	68.43	220	94.88	
2653	LOC100910891	1.39	5	40.23	11	55.78	
2654	Pank2	1.39	105	9.37	172	12.99	
2655	Kctd3	1.39	175	14.04	310	19.46	
2656	Vasp	1.39	150	23.38	280	32.39	
2657	Tex10	1.38	85	5.67	150	7.86	
2658	Wbp5	1.38	950	347.77	1780	481.53	
2659	Foxn2	1.38	87	6.17	159	8.54	
2660	Zc4h2	1.38	32	4.57	54	6.32	
2661	Zbtb41	1.38	50	5.49	90	7.6	
2662	Clip1	1.38	143	5.21	270	7.2	
2663	Tmem194b	1.38	61	5.16	102	7.15	
2664	Lzts2	1.38	194	23.82	353	32.96	
2665	Kank2	1.38	885	55.19	1647	76.35	
2666	Tspan5	1.38	219	13.59	396	18.8	
2667	Baiap2l1	1.38	102	9.57	216	13.23	
2668	Palld	1.38	85	4.81	150	6.66	
2669	RGD1306926	1.38	48	2.75	81	3.8	
2670	Snw1	1.38	102	15.96	166	22.07	
2671	Irx5	1.38	21	3.02	38	4.17	
2672	Nudc	1.38	140	33.24	238	45.98	
2673	Plekha5	1.38	187	8.17	426	11.3	
2674	Wdr55	1.38	214	22.21	387	30.71	
2675	Mon1b	1.38	71	9.51	139	13.15	
2676	Sprtn	1.38	38	6.12	71	8.46	
2677	Cep95	1.38	61	4.05	123	5.6	
2678	Arih1	1.38	332	17.28	572	23.88	
2679	Sft2d2	1.38	302	20.18	561	27.89	
2680	Smad9	1.38	67	5.06	114	6.99	
2681	Brwd1	1.38	309	5.58	462	7.71	
2682	Enah	1.38	257	22.17	410	30.61	
2683	Cep350	1.38	131	4.07	241	5.62	
2684	Cyb561d2	1.38	14	3.2	26	4.42	
2685	Bivm	1.38	70	9.36	111	12.92	
2686	Itga2	1.38	43	2.44	77	3.37	
2687	LOC100911393_1	1.38	16	6.03	29	8.33	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2688	Mtrf1	1.38	24	2.42	51	3.35	
2689	RGD1559786	1.38	45	10.13	82	13.98	
2690	Trim68	1.38	17	2.31	45	3.19	
2691	Usp43	1.38	20	1.51	32	2.08	
2692	ENSRNOG00000046	1.38	10	1.89	21	2.62	
2693	Zfp507	1.38	205	9.86	324	13.61	
2694	Mettl9	1.38	146	27.35	250	37.74	
2695	Nap111	1.38	205	41.97	341	57.87	
2696	Sspn	1.38	113	11.11	225	15.32	
2697	Hnrnpab_2	1.38	0	43.32	0	59.72	
2698	Auts2	1.38	236	23.36	426	32.19	
2699	Gins2	1.38	55	4.4	98	6.07	
2700	Pam	1.38	4530	313.92	8485	432.47	
2701	Dchs1	1.38	300	10.12	555	13.94	
2702	Cep112	1.38	99	1.99	151	2.75	
2703	Ing2	1.38	22	2.51	36	3.46	
2704	Prdm10	1.38	60	2.05	120	2.82	
2705	Fundc1	1.38	46	6.83	89	9.41	
2706	Urb2	1.38	40	2.26	92	3.12	
2707	Eps15	1.38	541	54.49	1066	75.04	
2708	Tfcp2	1.38	133	9.71	244	13.36	
2709	Sowahc	1.38	118	9.65	218	13.27	
2710	P3h2	1.38	38	4.29	82	5.9	
2711	Zscan2	1.38	33	2.86	56	3.93	
2712	Rbm41	1.38	47	1.62	71	2.23	
2713	Sec24b	1.38	413	24.83	774	34.15	
2714	Iqsec2	1.37	100	4.49	192	6.18	
2715	Dennd1a	1.37	271	4.9	487	6.73	
2716	RGD1563242	1.37	58	11.14	90	15.3	
2717	Cebpg	1.37	73	7.21	127	9.9	
2718	P4ha3	1.37	53	8.07	114	11.09	
2719	Safb	1.37	150	12.61	276	17.33	
2720	Arsk	1.37	42	4.32	80	5.94	
2721	Tpp2	1.37	247	10.5	446	14.43	
2722	Zcchc8	1.37	123	8.71	220	11.96	
2723	Bcr	1.37	188	12.68	338	17.41	
2724	Usp47	1.37	549	25.58	938	35.13	
2725	Rabep1	1.37	182	10.23	323	14.05	
2726	Zeb2	1.37	689	36.19	1313	49.64	
2727	Zfand5	1.37	184	29.51	346	40.47	
2728	Naa15	1.37	242	11.61	433	15.92	
2729	Kctd11	1.37	6	1	11	1.38	
2730	Adamts16	1.37	24	1.19	46	1.63	
2731	Ccdc181	1.37	16	2.28	25	3.12	
2732	Cdon	1.37	65	3.17	115	4.35	
2733	Cfap70	1.37	14	0.54	16	0.74	
2734	LOC100910581	1.37	0	2.31	0	3.17	
2735	Morc4	1.37	36	1.81	68	2.49	
2736	Nucb2	1.37	78	6.86	136	9.41	
2737	Sema6c	1.37	8	0.66	12	0.9	
2738	Zfp51	1.37	21	2.59	35	3.55	
2739	Zfp763	1.37	11	2.49	22	3.42	
2740	Arl10	1.37	34	5.55	68	7.61	
2741	Dgat2	1.37	10	0.69	20	0.94	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2742	Fbxo45	1.37	19	2.56	26	3.51	
2743	Golgb1	1.37	444	13.04	798	17.87	
2744	Gpsm2	1.37	24	2.52	44	3.45	
2745	Lymr1	1.37	11	1.75	23	2.4	
2746	RGD1563091	1.37	30	2.1	55	2.88	
2747	Spata9	1.37	27	2.1	47	2.87	
2748	Uap111	1.37	42	4.83	80	6.62	
2749	Zscan30	1.37	20	3.2	42	4.38	
2750	Cramp1l	1.37	163	8.63	310	11.82	
2751	Fat4	1.37	252	7.65	451	10.48	
2752	Mga	1.37	266	8.94	483	12.24	
2753	Itga8	1.37	251	12.49	445	17.1	
2754	Phlpp2	1.37	168	8.02	295	10.98	
2755	Phlpp1	1.37	159	5.29	277	7.24	
2756	Mylip	1.37	226	18.88	421	25.84	
2757	Plekhb2	1.37	299	31.97	559	43.75	
2758	Thyn1	1.37	100	18.79	151	25.72	
2759	Akap11	1.37	221	7.88	396	10.78	
2760	Dst	1.37	1433	18.5	2608	25.31	
2761	Aftph	1.37	171	11.47	284	15.69	
2762	Tpbg	1.37	272	42.05	506	57.5	
2763	03/08/15	1.37	193	12.58	331	17.2	
2764	Derl3	1.37	38	18.45	71	25.22	
2765	Canx	1.37	1879	134.27	3476	183.56	
2766	Commnd3	1.37	68	25.21	129	34.46	
2767	Col8a1	1.37	453	34.43	901	47.04	
2768	Tmem106b	1.37	142	17.36	255	23.72	
2769	Clcn3	1.37	123	9.69	224	13.24	
2770	Aff4	1.37	664	25.46	1217	34.77	
2771	Mbd6	1.37	94	8.92	174	12.18	
2772	AABR07002120.1	1.37	4	5.64	9	7.7	
2773	Fmr1	1.37	151	9.72	281	13.28	
2774	Zfp229	1.37	24	3.65	45	4.98	
2775	Ccdc62	1.37	95	2.9	136	3.96	
2776	Phf20l1	1.37	58	3.76	80	5.14	
2777	Lamp2	1.36	590	82.07	1080	112.03	
2778	Ibtk	1.36	163	11.26	303	15.36	
2779	Cwc27	1.36	92	6.27	164	8.56	
2780	Rasal2	1.36	107	3.11	169	4.25	
2781	Ndel1	1.36	117	12.18	212	16.61	
2782	Rap1a	1.36	66	8.82	140	12.03	
2783	Siae	1.36	65	5.96	124	8.14	
2784	Rab1a	1.36	311	42.43	546	57.87	
2785	Myo9b	1.36	292	11.64	538	15.87	
2786	Rock1	1.36	268	13.05	484	17.78	
2787	Sdad1	1.36	69	5.97	102	8.14	
2788	Vezt	1.36	71	5.66	122	7.71	
2789	Phc3	1.36	144	7.29	247	9.93	
2790	Tsc22d2	1.36	113	4.13	173	5.63	
2791	Tmem80	1.36	54	5.36	106	7.3	
2792	Abtb2	1.36	84	4.59	193	6.25	
2793	Mast3	1.36	55	2.99	94	4.07	
2794	Zdhhc17	1.36	126	6.27	186	8.54	
2795	Vopp1	1.36	65	7.66	122	10.42	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2796	Cped1	1.36	212	8.29	452	11.27	
2797	Bicd2	1.36	166	8.53	318	11.6	
2798	Atxn1l	1.36	87	13.33	158	18.11	
2799	Slc35g1	1.36	16	3.61	24	4.9	
2800	Khnyn	1.36	44	5.89	91	8.01	
2801	RGD1307315	1.36	13	2.03	29	2.76	
2802	Runx1	1.36	60	3.52	111	4.78	
2803	Slc18a2	1.36	20	1.37	34	1.86	
2804	Stx17	1.36	48	4.8	70	6.53	
2805	Tank	1.36	68	5.47	97	7.43	
2806	Zfp592	1.36	171	7.68	303	10.44	
2807	Papd5	1.36	98	5.4	183	7.34	
2808	Mam11	1.36	185	11.18	335	15.18	
2809	Tnpo1	1.36	516	20.68	914	28.08	
2810	Casp7	1.36	47	5.66	77	7.68	
2811	Arhgap18	1.36	118	12.83	211	17.41	
2812	Tceal8	1.36	122	42.72	228	57.95	
2813	Pik3ca	1.36	118	10.37	236	14.06	
2814	lcmt	1.36	45	8.9	82	12.07	
2815	Ubfd1	1.36	53	5.15	102	6.98	
2816	Tsn	1.36	68	16.72	126	22.66	
2817	Supt20	1.36	219	17.55	389	23.8	
2818	Zfp84	1.36	251	3.34	380	4.53	
2819	Asap1	1.36	103	7.12	198	9.65	
2820	Ubc	1.36	3810	544.6	6918	738.26	
2821	Ankib1	1.36	174	6.06	287	8.22	
2822	Nucb1	1.36	119	55.61	230	75.37	
2823	Invs	1.36	40	1.71	65	2.31	
2824	Gas2l1	1.36	53	6.38	102	8.64	
2825	Hnrnp2	1.36	135	29.43	248	39.87	
2826	Kif2a	1.36	189	21.94	339	29.74	
2827	Spire1	1.36	91	4.15	152	5.62	
2828	Pcm1	1.35	379	14.58	666	19.74	
2829	Pdap1	1.35	150	32.96	264	44.61	
2830	Magt1	1.35	295	19.66	515	26.6	
2831	Zbtb20	1.35	476	11.29	850	15.28	
2832	AABR07072539.1	1.35	3	2.86	5	3.87	
2833	Arhgef26	1.35	32	1.69	69	2.28	
2834	Ate1	1.35	205	10.8	361	14.62	
2835	SNORD79	1.35	21	89.45	38	121.02	
2836	Zfp579	1.35	33	3.55	57	4.8	
2837	Tab3	1.35	26	3.54	49	4.8	
2838	Calm2	1.35	173	58.86	320	79.6	
2839	Zswim4	1.35	79	5.35	153	7.24	
2840	Rrbp1	1.35	413	27.15	731	36.71	
2841	Thumpd3	1.35	106	14.27	186	19.29	
2842	Agpat5	1.35	50	4.62	80	6.24	
2843	Rn60_1_1359.1	1.35	62	4.93	128	6.66	
2844	Txndc9	1.35	80	18.07	143	24.41	
2845	Eif2b3	1.35	71	5.27	111	7.11	
2846	Nup35	1.35	38	6.76	70	9.13	
2847	RGD1306063	1.35	75	9.56	120	12.91	
2848	Zcchc24	1.35	148	10.56	268	14.26	
2849	Eme2	1.35	44	11.59	79	15.64	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2850	Ier3	1.35	36	10.17	65	13.72	
2851	Srek1	1.35	174	13.24	255	17.87	
2852	Zdhhc9	1.35	49	5.64	89	7.61	
2853	Lrrc14	1.35	69	6.85	117	9.25	
2854	Pik3r3	1.35	77	8.14	134	10.98	
2855	Lrrk1	1.35	73	2.37	119	3.2	
2856	Sp3	1.35	183	25.83	308	34.83	
2857	Stag1	1.35	279	9.06	482	12.21	
2858	Tmem47	1.35	173	14.73	316	19.86	
2859	Armc8	1.35	132	4.56	198	6.15	
2860	Rbm19	1.35	89	5.14	149	6.93	
2861	Cntrl	1.35	95	3.15	155	4.25	
2862	AABR07055834.1	1.35	6	0.96	10	1.29	
2863	Agtr1a	1.35	6	0.83	12	1.12	
2864	Chaf1a	1.35	60	5.4	103	7.27	
2865	Dusp22	1.35	45	3.13	58	4.21	
2866	Gtdc1	1.35	65	1.61	90	2.17	
2867	LOC100910867	1.35	33	0.58	30	0.77	
2868	LOC100911519	1.35	0	0.66	0	0.88	
2869	Mynn	1.35	77	9.27	145	12.47	
2870	Myo19	1.35	55	3.14	105	4.22	
2871	RGD1359508	1.35	8	1.59	17	2.14	
2872	Ripk3	1.35	9	0.9	12	1.22	
2873	Traf6	1.35	71	8.03	134	10.8	
2874	AABR07005535.1	1.35	5	0.8	8	1.08	
2875	AABR07034669.1	1.35	35	0.57	41	0.77	
2876	AABR07073453.1	1.35	4	0.35	9	0.48	
2877	AC114460.1	1.35	6	2.29	9	3.08	
2878	B3gnt1l	1.35	52	1.2	66	1.61	
2879	Cacnb1	1.35	6	0.53	12	0.71	
2880	Cbr1_2	1.35	0	3.84	0	5.17	
2881	Cebpz	1.35	137	10.4	229	13.99	
2882	Hcn4	1.35	6	0.33	9	0.44	
2883	Jtb	1.35	31	15.23	56	20.5	
2884	Kctd6	1.35	15	2.33	22	3.14	
2885	Pak1ip1	1.35	25	4.68	48	6.3	
2886	Parpbp	1.35	7	0.41	10	0.55	
2887	Pcdhb10	1.35	5	0.4	9	0.54	
2888	Per3	1.35	109	5.07	228	6.83	
2889	Pkig	1.35	273	67.4	620	90.7	
2890	Pth1r	1.35	13	1.64	25	2.21	
2891	Rps19bp1	1.35	5	3.52	9	4.73	
2892	SNORD45_2	1.35	0	22.35	0	30.08	
2893	Snrnp48	1.35	82	3.02	131	4.06	
2894	Thrb	1.35	27	0.28	34	0.37	
2895	Tmem136	1.35	78	8.18	145	11.01	
2896	Hnrnpu	1.34	800	67.63	1419	90.91	
2897	Fam53c	1.34	112	13.97	186	18.78	
2898	Fam84a	1.34	169	16.36	304	21.98	
2899	Zfp282	1.34	195	12.2	358	16.39	
2900	Vps54	1.34	151	9.06	262	12.17	
2901	Mkl1	1.34	91	4.68	168	6.28	
2902	Rsu1	1.34	107	21.35	205	28.67	
2903	Smarca2	1.34	268	10.62	450	14.26	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2904	Smim19	1.34	79	7.17	125	9.62	
2905	AABR07002177.1	1.34	15	19.95	20	26.78	
2906	Atp9b	1.34	268	11.29	515	15.15	
2907	Rnf144b	1.34	64	2.81	143	3.77	
2908	St6galnac3	1.34	102	4.83	244	6.48	
2909	Smc5	1.34	153	6.4	275	8.59	
2910	Ptbp2	1.34	231	6.47	373	8.68	
2911	Fam65a	1.34	214	9.05	360	12.14	
2912	Nck1	1.34	58	7.06	90	9.47	
2913	Dnm1l	1.34	149	13.31	230	17.85	
2914	U2surp	1.34	138	11.37	226	15.24	
2915	Smarcc1	1.34	387	25.98	656	34.83	
2916	Cox5a	1.34	75	52.5	142	70.38	
2917	Elf4	1.34	62	8.58	108	11.5	
2918	Sft2d1	1.34	101	20.73	185	27.79	
2919	Kpna1	1.34	127	7.96	233	10.68	
2920	Thoc2	1.34	196	11.64	363	15.6	
2921	Lrrc1	1.34	87	6.47	140	8.67	
2922	Pdcd10	1.34	123	22.45	214	30.08	
2923	RT1-A2	1.34	51	21.88	77	29.32	
2924	Nop14	1.34	80	6.57	144	8.8	
2925	AABR07012475.2	1.34	22	2.65	41	3.55	
2926	Prpf38a	1.34	64	10.49	130	14.06	
2927	Mdp1	1.34	26	4.59	44	6.14	
2928	Fermt2	1.34	370	33.38	686	44.7	
2929	Skil	1.34	137	16.47	265	22.06	
2930	Ric8a	1.34	157	21.8	281	29.19	
2931	Zmynd11	1.34	314	21.46	550	28.73	
2932	Adck2	1.34	50	6.21	87	8.31	
2933	Smug1	1.34	46	4.58	78	6.13	
2934	Ddx46	1.34	258	19.14	428	25.62	
2935	Dctn4	1.34	192	34.37	323	45.99	
2936	Cyp4v3	1.34	21	1.87	41	2.5	
2937	LOC100910872	1.34	8	4.83	19	6.47	
2938	Mycn	1.34	40	5.27	71	7.05	
2939	Ythdc2	1.34	43	3.59	69	4.81	
2940	Dcp2_1	1.34	18	7.23	25	9.67	
2941	SNORD75_2	1.34	37	221.91	66	296.89	
2942	Rad23b	1.34	482	59.71	855	79.86	
2943	Nr2c1	1.34	161	6.47	294	8.65	
2944	Camsap2	1.34	258	10.35	484	13.83	
2945	Ddhd1	1.34	71	3.51	95	4.69	
2946	ENSRNOG0000006	1.34	113	11.36	211	15.17	
2947	Tada1	1.34	64	7.55	109	10.09	
2948	AABR07029195.1	1.34	2	6.23	4	8.32	
2949	Avpi1	1.34	31	9.35	54	12.49	
2950	Dzank1	1.34	34	2	45	2.68	
2951	Jdp2	1.34	22	4.38	48	5.85	
2952	Ube2f	1.34	32	9.08	56	12.13	
2953	Kihl2	1.34	71	5.03	139	6.71	
2954	Lpgat1	1.34	61	5.39	109	7.2	
2955	Mettl1	1.34	17	2.43	29	3.25	
2956	Ptk2b	1.34	38	2.58	79	3.44	
2957	Swt1	1.34	92	4.13	160	5.52	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
2958	Sdcbp	1.33	341	45.32	613	60.49	
2959	Thada	1.33	154	4.27	293	5.7	
2960	Pitpna	1.33	126	22.42	234	29.91	
2961	Fxr1	1.33	39	12.78	56	17.04	
2962	Gpatch8	1.33	423	15.13	726	20.17	
2963	Hcfc2	1.33	83	7.68	162	10.23	
2964	Zp2	1.33	30	3.74	52	4.99	
2965	Idi1	1.33	144	17.77	249	23.69	
2966	Zfp386	1.33	147	7.05	234	9.39	
2967	Rngtt	1.33	115	4.82	178	6.42	
2968	Ptpn1	1.33	120	18.41	219	24.52	
2969	Stam	1.33	108	10.5	177	13.99	
2970	Ankhd1	1.33	395	11.36	668	15.12	
2971	Upf3a	1.33	70	11.49	133	15.3	
2972	Uba5	1.33	116	10.4	198	13.84	
2973	Whsc1l1	1.33	259	9.69	489	12.9	
2974	Galnt1	1.33	226	38.05	386	50.61	
2975	Spcs3	1.33	219	22.99	395	30.58	
2976	B3galnt1	1.33	48	8.63	103	11.47	
2977	Cryl1	1.33	16	2.24	20	2.97	
2978	Hdac11	1.33	15	1.3	21	1.72	
2979	Ostf1	1.33	35	8.33	57	11.07	
2980	Sesn1	1.33	98	7.56	149	10.04	
2981	Tsfm	1.33	40	5.83	46	7.75	
2982	Denr	1.33	51	16.8	120	22.33	
2983	Il16	1.33	10	0.65	23	0.87	
2984	Mrs2	1.33	25	3.34	52	4.44	
2985	Npepo	1.33	99	1.19	198	1.58	
2986	Rmdn1	1.33	69	3.22	104	4.29	
2987	Rufy2	1.33	1	1.79	3	2.38	
2988	Ttpal	1.33	110	7.74	203	10.29	
2989	Dyrk2	1.33	116	7.11	208	9.44	
2990	Zfhx3	1.33	149	3.62	249	4.81	
2991	Camsap1	1.33	256	10.69	425	14.2	
2992	Chordc1	1.33	79	7.55	137	10.03	
2993	Zfp318	1.33	164	6.2	271	8.24	
2994	Klhdc8b	1.33	62	6.93	105	9.2	
2995	Snx12	1.33	154	12.56	271	16.67	
2996	Atp11b	1.33	104	8.57	203	11.37	
2997	Zfp618	1.33	89	4.62	168	6.13	
2998	Pdp1	1.33	102	13.32	183	17.68	
2999	Pdzd2	1.33	180	4.46	309	5.91	
3000	RGD1309621	1.33	213	14.39	377	19.09	
3001	Uba6	1.33	552	24.09	989	31.95	
3002	Atp2c1	1.33	178	18.57	303	24.63	
3003	Tpr	1.33	390	18.23	696	24.17	
3004	Tmem245	1.33	239	22.13	430	29.33	
3005	Ddx20	1.33	75	8.53	134	11.31	
3006	Prim2	1.33	58	3.64	90	4.82	
3007	Ttc33	1.33	32	4.45	55	5.9	
3008	Eps8	1.32	106	7.29	196	9.66	
3009	Secisbp2l	1.32	543	27.36	937	36.24	
3010	Arhgef1	1.32	273	25.12	458	33.26	
3011	Lrrc16a	1.32	191	7.15	362	9.46	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3012	Zbtb2	1.32	35	4.04	64	5.35	
3013	Zfp467	1.32	77	5.96	128	7.9	
3014	Sgce	1.32	138	25.31	249	33.52	
3015	Rere	1.32	933	26.41	1680	34.97	
3016	Cdc42	1.32	297	98.29	563	130.14	
3017	Tmem68	1.32	77	6.52	134	8.64	
3018	Cmtm7	1.32	158	12.2	294	16.15	
3019	Otud7b	1.32	175	8.04	332	10.64	
3020	Mlx	1.32	83	13.89	147	18.38	
3021	Khdrbs1	1.32	362	46.26	641	61.22	
3022	Snx16	1.32	25	2.03	49	2.69	
3023	Ccnj	1.32	0	1.12	0	1.49	
3024	Jade3	1.32	83	9.98	162	13.2	
3025	Klf15	1.32	68	5.82	141	7.69	
3026	LOC679894	1.32	26	1.82	46	2.41	
3027	Nudcd3	1.32	16	8.56	25	11.32	
3028	Pde5a	1.32	34	1.39	62	1.83	
3029	Vps33b	1.32	38	3.83	64	5.07	
3030	Wipi2	1.32	90	12.6	147	16.66	
3031	Tcf7l2	1.32	199	12.57	342	16.62	
3032	Zfp238	1.32	82	18.92	144	25.02	
3033	Arhgef10l	1.32	160	11.3	258	14.93	
3034	Erf	1.32	65	5.46	107	7.22	
3035	Rn60_X_0746.3	1.32	56	27.97	99	36.96	
3036	3110040N11Rik	1.32	44	7.6	60	10.05	
3037	Arhgap10	1.32	119	5.95	209	7.86	
3038	Bdp1	1.32	141	5.18	252	6.85	
3039	Csrp2	1.32	478	114.35	877	151.08	
3040	St6gal1	1.32	112	8.9	199	11.76	
3041	Abhd6	1.32	127	9.6	259	12.68	
3042	Slco5a1	1.32	134	6.3	299	8.32	
3043	Zfat	1.32	58	2.44	117	3.23	
3044	Tagln2	1.32	434	121.43	785	160.29	
3045	Pomp	1.32	0	17.49	0	23.07	
3046	Taf2	1.32	139	8.55	243	11.27	
3047	Fam175a	1.32	45	4.26	75	5.62	
3048	Klhl23	1.32	54	3.48	92	4.59	
3049	RGD1565183	1.32	8	13.27	15	17.5	
3050	RGD1305178	1.32	64	10.07	108	13.28	
3051	Rpgr	1.32	38	2.31	55	3.04	
3052	Ttk	1.32	25	1.82	44	2.4	
3053	Cep120	1.32	228	12.4	433	16.35	
3054	Ascc3	1.32	179	5.98	316	7.89	
3055	Arhgef40	1.32	180	9	314	11.86	
3056	Cep63	1.32	78	4.97	126	6.55	
3057	Mterfd1	1.32	68	3.69	136	4.86	
3058	Zranb1	1.32	105	11.47	196	15.11	
3059	Eif2s1	1.32	152	32.08	271	42.26	
3060	Casc3	1.32	231	18.49	408	24.36	
3061	Phf3	1.32	225	9.49	400	12.5	
3062	Hdac10	1.32	30	3.57	46	4.7	
3063	Uchl5	1.32	53	3.61	104	4.76	
3064	Znhit6	1.32	31	4.87	65	6.42	
3065	Zufsp	1.32	56	3.77	84	4.96	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3066	Sostdc1	1.32	284	57.71	501	76	
3067	Pparg	1.32	244	21.15	434	27.85	
3068	Edrf1	1.32	76	3.07	122	4.04	
3069	Ubxn7	1.32	51	19.68	91	25.9	
3070	Hsd17b4	1.32	233	28.35	425	37.32	
3071	Eif5	1.32	235	41.42	427	54.52	
3072	Cdc14a	1.32	67	2.02	113	2.66	
3073	Irf9	1.32	29	5.66	53	7.45	
3074	Sifn5	1.32	79	4.61	139	6.06	
3075	Bcl2l13	1.32	113	16.93	200	22.26	
3076	Cd14	1.32	54	11.51	96	15.14	
3077	Rmi1	1.32	54	9.1	95	11.97	
3078	Shfm1	1.32	63	25.97	114	34.15	
3079	Dedd	1.32	59	17.32	99	22.78	
3080	Rnf2	1.32	153	20.62	262	27.11	
3081	Fam193a	1.32	288	16.69	504	21.95	
3082	Fggy	1.31	70	5.62	125	7.39	
3083	Ndufv3	1.31	99	20.17	157	26.51	
3084	Stk39	1.31	110	5.49	210	7.22	
3085	Atpif1	1.31	68	43.42	128	57.07	
3086	Cab39l	1.31	160	12.18	267	16	
3087	Hibch	1.31	50	6.14	97	8.06	
3088	Tapt1	1.31	118	9.56	193	12.56	
3089	Chmp3	1.31	59	14.29	102	18.78	
3090	Emp1	1.31	394	49.44	696	64.95	
3091	Arnt	1.31	205	21.93	333	28.81	
3092	Col4a3bp	1.31	149	7.53	249	9.89	
3093	Hsp90aa1	1.31	0	6.08	0	7.99	
3094	Klhl8	1.31	51	4.03	92	5.3	
3095	Specc1l	1.31	323	14.28	539	18.75	
3096	Stag2	1.31	293	14.99	529	19.67	
3097	Akap9	1.31	421	10.37	721	13.61	
3098	Ddb1	1.31	1875	157.27	3341	206.41	
3099	Ppid	1.31	60	17.24	115	22.62	
3100	Vps13c	1.31	134	3.42	227	4.49	
3101	Ttl	1.31	78	9.58	123	12.56	
3102	Ddhd2	1.31	97	8.74	158	11.46	
3103	Ufsp2	1.31	85	13.44	144	17.62	
3104	Cbl	1.31	91	7.73	158	10.14	
3105	Tfdp1	1.31	173	19.78	297	25.93	
3106	Smurf1	1.31	207	10.47	347	13.72	
3107	Casp8ap2	1.31	83	3.78	152	4.96	
3108	Ctnna3_1	1.31	59	15.75	115	20.65	
3109	Unc119	1.31	84	21.78	141	28.55	
3110	AABR07043748.1	1.31	29	7.84	46	10.28	
3111	Gcc2	1.31	103	4.89	183	6.41	
3112	Cnot6	1.31	316	33.31	492	43.66	
3113	Tet3	1.31	205	7.45	328	9.76	
3114	Med13	1.31	477	20.88	817	27.32	
3115	Elmod3	1.31	55	3.28	81	4.29	
3116	Fra10ac1	1.31	20	2.16	38	2.83	
3117	Fsd1	1.31	5	0.31	10	0.4	
3118	Gk	1.31	34	1.36	56	1.78	
3119	Herc4	1.31	155	8.31	250	10.87	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3120	Mrpl33	1.31	22	18.41	42	24.09	
3121	Rn60_20_0046.5	1.31	4	2.27	7	2.97	
3122	Sv2a	1.31	14	1.02	24	1.33	
3123	AABR07011013.1	1.31	12	2.29	14	3	
3124	AABR07072711.1	1.31	2	0.41	3	0.53	
3125	AC114446.1	1.31	2	2.38	2	3.11	
3126	Amh	1.31	8	1.74	14	2.28	
3127	Ankrd29_1	1.31	2	1.76	7	2.31	
3128	Bmp3	1.31	5	0.28	9	0.36	
3129	Casp6	1.31	10	10.5	26	13.74	
3130	Cby1	1.31	18	9.34	27	12.22	
3131	Cdca7l	1.31	32	3.36	50	4.39	
3132	Cnksr2	1.31	10	0.29	25	0.37	
3133	Dtwd1	1.31	13	1.86	25	2.43	
3134	Eif1a	1.31	90	15.06	153	19.71	
3135	Endov	1.31	26	3.21	42	4.2	
3136	Enox2	1.31	12	0.49	20	0.64	
3137	Enpp1	1.31	59	4.95	105	6.47	
3138	ENSRNOG00000053	1.31	0	1.5	0	1.96	
3139	Fam115c_2	1.31	0	1.47	1	1.92	
3140	Fam131b	1.31	4	0.36	9	0.47	
3141	Fndc5	1.31	4	0.66	10	0.87	
3142	Hyls1	1.31	8	3.07	14	4.02	
3143	Ifi44l	1.31	5	1.09	8	1.42	
3144	Larp7	1.31	64	12.1	110	15.83	
3145	LOC100361180	1.31	1	7.05	1	9.22	
3146	Mapk8	1.31	110	7.88	162	10.3	
3147	Mina	1.31	10	2.08	18	2.72	
3148	Nol3	1.31	4	0.96	7	1.25	
3149	Pcdhb2	1.31	4	0.6	7	0.79	
3150	Pdgfb	1.31	12	1.33	20	1.73	
3151	Pdzk1	1.31	101	2.19	153	2.87	
3152	Plch1	1.31	7	0.22	11	0.28	
3153	Plcl2	1.31	136	7.35	224	9.62	
3154	Plp1	1.31	27	2.86	50	3.74	
3155	Ppl	1.31	10	0.46	24	0.6	
3156	Pusl1	1.31	13	1.42	17	1.86	
3157	Pycard	1.31	4	1.56	7	2.04	
3158	RGD1564688	1.31	0	2.89	1	3.78	
3159	Slc51a	1.31	41	0.9	24	1.18	
3160	Spn	1.31	4	0.37	7	0.49	
3161	Vipr2	1.31	15	0.33	13	0.44	
3162	Zfp1	1.31	14	3.59	26	4.7	
3163	Zfp354c	1.31	109	5.28	185	6.91	
3164	AABR07007130.1	1.31	7	1.31	13	1.71	
3165	Actr6	1.31	86	13.44	144	17.59	
3166	Ccdc86	1.31	51	10.75	94	14.07	
3167	Cd93	1.31	4	0.3	7	0.4	
3168	Fbxl15	1.31	4	1.08	7	1.41	
3169	Hecw2	1.31	15	0.27	20	0.36	
3170	Ica1	1.31	48	3.87	101	5.06	
3171	Rimbp3	1.31	4	0.27	7	0.35	
3172	Sntb1	1.31	43	1.36	49	1.78	
3173	Itns2	1.31	199	7.77	349	10.15	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3174	Ube4a	1.31	368	18.63	631	24.34	
3175	Zbed5	1.31	41	13.83	49	18.07	
3176	Dctn1	1.31	359	28.83	626	37.66	
3177	Stmn1	1.31	226	63.04	425	82.33	
3178	Ncoa6	1.31	293	13.85	510	18.08	
3179	LOC100363800	1.31	74	92.08	126	120.18	
3180	Erc1	1.3	289	9.09	493	11.87	
3181	Cdk11b	1.3	179	19.83	315	25.86	
3182	Acer3	1.3	70	4.06	117	5.3	
3183	Pole4	1.3	46	6.54	87	8.53	
3184	Kif1b	1.3	826	13.46	1377	17.55	
3185	Wdr1	1.3	427	50.78	770	66.2	
3186	Fhod1	1.3	101	7.61	183	9.91	
3187	Bcl2l2	1.3	120	11.62	200	15.15	
3188	Ncbp2_1	1.3	68	22.25	127	29	
3189	Paics	1.3	78	27.28	159	35.56	
3190	Rdx	1.3	165	28.13	282	36.65	
3191	Steap2	1.3	42	3.64	70	4.75	
3192	Lime1	1.3	39	5.94	61	7.74	
3193	Tgfbrap1	1.3	117	6.01	188	7.82	
3194	Trmt44	1.3	53	1.58	100	2.06	
3195	Zfyve27	1.3	133	7.46	235	9.7	
3196	Llgl2	1.3	37	2.29	62	2.99	
3197	Mettl14	1.3	70	7.31	115	9.52	
3198	Sh3bgrl	1.3	69	28.58	116	37.2	
3199	Akr1c14	1.3	3577	542.17	6302	705.52	
3200	Sec24a	1.3	179	10.21	251	13.29	
3201	RGD1308428	1.3	189	7.73	320	10.06	
3202	Aifm1	1.3	138	15.5	237	20.16	
3203	Adam23	1.3	37	2.9	81	3.76	
3204	Frrs1	1.3	25	4.68	43	6.09	
3205	Tm2d2	1.3	76	19.43	125	25.26	
3206	Snx18	1.3	184	14.83	332	19.28	
3207	Prkci	1.3	146	10.42	265	13.54	
3208	Arf2	1.3	43	6.99	82	9.08	
3209	Fstl1	1.3	431	33.08	762	42.98	
3210	Rnf146	1.3	65	11.8	125	15.34	
3211	Zc3h11a	1.3	678	45.61	1059	59.25	
3212	Cln8	1.3	44	6.19	73	8.04	
3213	Atp5i	1.3	19	23.8	39	30.91	
3214	Ddr1	1.3	210	17.34	374	22.51	
3215	RGD1565498	1.3	41	4.21	72	5.47	
3216	Ireb2	1.3	182	14.99	311	19.45	
3217	Cwf19l2	1.3	61	1.85	84	2.41	
3218	Nedd4l	1.3	99	2.86	128	3.72	
3219	Mus81	1.3	49	6	77	7.78	
3220	Ccdc136	1.3	82	4.62	150	6	
3221	Msi1	1.3	63	6.13	112	7.95	
3222	Gak	1.3	234	17.16	411	22.25	
3223	Ripk1	1.3	123	9.04	236	11.72	
3224	Furin	1.3	587	48.91	1010	63.42	
3225	Bbs10	1.3	14	2.03	26	2.63	
3226	Cep162	1.3	27	0.92	48	1.2	
3227	Immt	1.3	251	24.45	402	31.69	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3228	Kcnk6_1	1.3	12	2.34	20	3.04	
3229	Pmm2	1.3	138	17.7	213	22.94	
3230	Tcte1	1.3	17	1.11	26	1.43	
3231	Tlhc1	1.3	38	4	46	5.18	
3232	Zc3h13	1.3	231	11.8	397	15.28	
3233	Rnf111l_1	1.29	41	17.66	82	22.87	
3234	Bccip	1.29	53	10.88	96	14.09	
3235	Azin1	1.29	426	34.17	750	44.24	
3236	Gmcl1	1.29	139	11.5	251	14.89	
3237	Abi1	1.29	293	25.56	538	33.08	
3238	Rlim	1.29	14	14.44	29	18.69	
3239	Zfyve1	1.29	126	9.85	275	12.75	
3240	Fam120a	1.29	619	63.37	1047	81.98	
3241	Mpp5	1.29	230	13.6	393	17.59	
3242	Arhgap12	1.29	219	10.95	359	14.17	
3243	Mef2d	1.29	188	18.81	330	24.32	
3244	Sec11a	1.29	143	36.78	253	47.56	
3245	Cdkl5	1.29	235	7.25	314	9.37	
3246	Armcx3	1.29	164	15.67	295	20.25	
3247	Rnf14	1.29	232	18.63	445	24.07	
3248	Nasp	1.29	146	15.51	237	20.04	
3249	SunZ	1.29	154	20.9	259	27.01	
3250	Lrch2	1.29	44	5.15	78	6.65	
3251	AABR07019085.1	1.29	6	0.98	12	1.27	
3252	AABR07060519.1	1.29	23	3.56	46	4.59	
3253	Ankrd24	1.29	10	1.15	15	1.48	
3254	Hypk	1.29	18	20.42	30	26.38	
3255	Lgalsl	1.29	43	4.54	78	5.87	
3256	LOC691995	1.29	11	2.7	19	3.49	
3257	Pot1b	1.29	41	4.15	85	5.36	
3258	Tinf2	1.29	26	4.81	37	6.22	
3259	Zfp120	1.29	12	3.23	20	4.17	
3260	Cdc14b	1.29	245	8.05	476	10.39	
3261	Vps25	1.29	0	3.44	0	4.44	
3262	Lcor	1.29	198	3.04	384	3.92	
3263	Smad1	1.29	101	8.87	207	11.44	
3264	Rad54l2	1.29	45	5.1	55	6.58	
3265	Tmco1	1.29	64	16.99	116	21.93	
3266	Ggnbp2	1.29	164	15.01	261	19.36	
3267	Rhobtb1	1.29	510	23.14	906	29.84	
3268	Ndufaf4	1.29	29	3.44	50	4.43	
3269	Pick1	1.29	49	5.74	84	7.4	
3270	Plekhm3	1.29	100	3.68	174	4.74	
3271	Snopc5	1.29	29	8.79	50	11.33	
3272	Cul5	1.29	147	11.86	260	15.29	
3273	Pcf11	1.29	122	5.65	208	7.29	
3274	Ulk2	1.29	292	12.78	581	16.47	
3275	Ncapg2	1.29	61	2.31	92	2.98	
3276	Map3k3	1.29	216	12.51	369	16.11	
3277	Sdhaf2	1.29	82	12.69	131	16.35	
3278	Spag9	1.29	615	23.59	1005	30.39	
3279	Nln	1.29	113	8.97	205	11.55	
3280	Cdan1	1.29	83	7.02	140	9.04	
3281	Cfap97	1.29	43	3.2	56	4.12	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3282	Fam171a1	1.29	68	7.55	126	9.72	
3283	Mrps10	1.29	18	5.29	38	6.82	
3284	Scarf2	1.29	23	1.97	39	2.53	
3285	Wrap73	1.29	43	4.74	69	6.11	
3286	Zfp954	1.29	19	3.3	33	4.25	
3287	Adgre5	1.29	20	2.1	33	2.7	
3288	Gbp2	1.29	112	15.76	197	20.29	
3289	LOC100360056_1	1.29	1	35.61	2	45.85	
3290	Rps6ka6	1.29	21	1.5	33	1.93	
3291	Rapgef2	1.29	214	5.62	389	7.23	
3292	Snap29	1.29	139	12.31	256	15.85	
3293	Gmeb1	1.29	97	6.17	177	7.94	
3294	Asxl2	1.29	123	9.31	210	11.98	
3295	RGD1305089	1.29	67	6.67	106	8.58	
3296	Trnau1ap	1.29	52	4.07	91	5.24	
3297	Dnaaf2	1.29	28	3.64	49	4.68	
3298	Exd2	1.29	80	7.61	145	9.78	
3299	Ict1	1.29	36	10.93	55	14.06	
3300	Rn60_10_0890.5	1.29	0	6.18	0	7.95	
3301	Etv1	1.29	89	4.3	157	5.53	
3302	Ranbp10	1.29	178	8.3	298	10.67	
3303	Stx16	1.29	182	11.5	310	14.78	
3304	LOC100363675	1.29	174	48.28	228	62.05	
3305	Osbpl8	1.29	188	8.47	335	10.88	
3306	Ahsa2	1.28	79	9.2	128	11.83	
3307	Fytd1	1.28	109	25.4	180	32.63	
3308	Cyb5r4	1.28	96	11.53	165	14.82	
3309	Nfu1	1.28	69	12.73	113	16.35	
3310	Tcea1_2	1.28	80	26.1	142	33.52	
3311	Bmp2	1.28	557	56.57	1024	72.63	
3312	Tmem41b	1.28	67	7.07	113	9.07	
3313	Rab5c	1.28	219	36.88	366	47.35	
3314	Opa1	1.28	187	16.19	344	20.78	
3315	Fahd2a	1.28	59	9.27	103	11.9	
3316	Gfm1	1.28	61	7.5	106	9.62	
3317	Lpin2	1.28	77	3.6	121	4.62	
3318	LOC100910833	1.28	29	16.37	55	21.01	
3319	Ino80	1.28	146	7.35	283	9.43	
3320	Fnbp4	1.28	281	15.57	518	19.97	
3321	Antxr1	1.28	1025	85.78	1884	110.03	
3322	Sav1	1.28	100	16.26	180	20.86	
3323	Glud1	1.28	411	46.98	713	60.24	
3324	AABR07036374.1	1.28	12	1.72	16	2.2	
3325	BC068281	1.28	17	2.31	30	2.96	
3326	Camk2n1	1.28	7	6.2	16	7.94	
3327	Fam203a	1.28	24	3.37	40	4.32	
3328	Lrp12	1.28	243	20.08	444	25.73	
3329	Nfatc2	1.28	16	0.68	21	0.88	
3330	Plcb1	1.28	23	0.52	35	0.66	
3331	RGD1309748	1.28	323	11.88	657	15.22	
3332	Safb2	1.28	127	10.69	245	13.71	
3333	Supt3h	1.28	44	8.48	67	10.86	
3334	Thns1	1.28	7	0.95	12	1.22	
3335	Trmt2a	1.28	64	8.46	105	10.85	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3336	Zfp472	1.28	14	2.5	24	3.2	
3337	Arpc1b	1.28	168	38.45	283	49.28	
3338	Btbd9	1.28	95	5.19	177	6.65	
3339	Cd1d1	1.28	22	4.14	36	5.31	
3340	Clip4	1.28	24	0.97	24	1.25	
3341	Imp3	1.28	21	5.27	36	6.75	
3342	Kazn	1.28	56	1.21	78	1.54	
3343	LOC100911660	1.28	0	1.99	0	2.55	
3344	LOC683897	1.28	33	2.09	46	2.68	
3345	Myo1f	1.28	20	0.66	43	0.85	
3346	RGD1565222	1.28	37	2.59	46	3.32	
3347	Serpinf1	1.28	9	1.64	14	2.1	
3348	Grb14	1.28	909	124.5	1677	159.54	
3349	Hnrpd	1.28	231	43.02	401	55.09	
3350	Mki67	1.28	141	4.84	241	6.19	
3351	AABR07070032.1	1.28	41	162.73	107	208.26	
3352	Fam208b	1.28	102	4.55	171	5.82	
3353	Atrx	1.28	316	7.62	527	9.74	
3354	Edem3	1.28	345	13.92	573	17.81	
3355	Atp5f1_2	1.28	0	14.57	0	18.63	
3356	Pbxip1	1.28	510	60.95	890	77.95	
3357	Acap3	1.28	43	3.09	72	3.95	
3358	Mrps31	1.28	70	8.81	108	11.26	
3359	Plekha8	1.28	74	3.75	130	4.8	
3360	Zfp422	1.28	103	15.23	170	19.47	
3361	Cds2	1.28	97	14.39	176	18.39	
3362	Ptprd	1.28	694	18.23	1204	23.29	
3363	Fam168a	1.28	297	17.56	491	22.44	
3364	Peli2	1.28	57	2.67	127	3.42	
3365	Ube2d2	1.28	197	46.34	302	59.19	
3366	Ppm1a	1.28	141	14.45	207	18.46	
3367	Tubb2a	1.28	133	28.44	219	36.31	
3368	Fem1c	1.28	121	6.2	213	7.91	
3369	Mvp	1.28	131	11.43	216	14.59	
3370	Zc3h15	1.28	127	23.95	194	30.56	
3371	Fubp1	1.28	308	26.37	510	33.64	
3372	Dlst	1.28	273	31.53	466	40.23	
3373	Sept2	1.28	595	76.14	1000	97.13	
3374	Ascc2	1.28	81	8.21	125	10.47	
3375	Tradd	1.28	17	4.62	30	5.89	
3376	Zfp839	1.28	32	2.24	38	2.86	
3377	LOC100911774	1.28	0	12.38	1	15.79	
3378	Lrrc71	1.28	33	2.85	56	3.64	
3379	Zscan22	1.28	18	4.14	33	5.28	
3380	Hectd1	1.28	594	23.26	983	29.66	
3381	Smad7	1.27	113	8.01	193	10.21	
3382	Prpf6	1.27	291	27.52	503	35.08	
3383	Ears2_1	1.27	22	8.12	48	10.35	
3384	Wwp1	1.27	57	5.22	81	6.65	
3385	Usp46	1.27	194	10.49	374	13.36	
3386	Brd7	1.27	181	21.57	297	27.48	
3387	Gyg1	1.27	63	10.97	112	13.97	
3388	Lrba	1.27	215	5.27	338	6.71	
3389	Fgfr1op2	1.27	92	7.93	157	10.1	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3390	Rarg	1.27	75	5.61	133	7.14	
3391	RGD1310081	1.27	81	2.94	139	3.74	
3392	Usp32	1.27	261	8.53	403	10.86	
3393	Atp5j	1.27	50	40.23	91	51.22	
3394	Rbm15b	1.27	110	15.09	188	19.2	
3395	Phf8	1.27	338	20.1	602	25.59	
3396	Gle1	1.27	132	13.6	213	17.31	
3397	Csgalnact2	1.27	93	10.36	182	13.18	
3398	RGD1307100	1.27	352	6.75	626	8.59	
3399	Sos2	1.27	284	9.5	432	12.08	
3400	Agl	1.27	87	3.83	153	4.87	
3401	Bend4	1.27	14	2.22	22	2.82	
3402	Ccdc93	1.27	44	4.57	77	5.81	
3403	Gadd45gip1	1.27	17	2.99	26	3.8	
3404	Katnbl1	1.27	31	3.31	40	4.2	
3405	Met	1.27	186	12.46	307	15.84	
3406	Rdh13	1.27	15	1.15	24	1.46	
3407	RGD1560225	1.27	15	0.82	28	1.04	
3408	Rnf34	1.27	83	11.08	135	14.09	
3409	Sp2	1.27	55	4.42	100	5.62	
3410	Srsf12	1.27	16	1.37	28	1.74	
3411	Cep250	1.27	108	4.32	182	5.49	
3412	Hmg20b	1.27	109	17.28	149	21.97	
3413	LOC100361056	1.27	32	7.93	57	10.08	
3414	Pcdh20	1.27	10	0.7	17	0.89	
3415	Ralgapa2	1.27	179	4.52	299	5.75	
3416	Acin1	1.27	1000	46.43	1620	59.01	
3417	Rlf	1.27	148	7.34	244	9.32	
3418	Als2	1.27	274	13.56	437	17.22	
3419	Ppp1cb	1.27	347	39.46	582	50.12	
3420	Ubap2	1.27	333	25.89	600	32.88	
3421	Ythdf3	1.27	276	19.98	472	25.37	
3422	Kdm5a	1.27	474	13.74	819	17.45	
3423	Itga6	1.27	784	43.47	1306	55.19	
3424	Lrrc42	1.27	180	24.75	278	31.42	
3425	Cfl1	1.27	910	360.1	1527	457.11	
3426	Npepps	1.27	318	20.74	518	26.33	
3427	Eif2ak4	1.27	180	5.2	255	6.6	
3428	Plekhn1	1.27	101	5.27	193	6.68	
3429	Sptan1	1.27	1455	61.89	2447	78.53	
3430	Fgfr1op	1.27	61	3.73	96	4.73	
3431	Akap10	1.27	131	6.9	194	8.76	
3432	Rps6kb1	1.27	96	8.89	174	11.27	
3433	Fam32a	1.27	137	22.67	220	28.75	
3434	Dip2c	1.27	169	8.38	288	10.63	
3435	Rab8a	1.27	131	23.89	223	30.28	
3436	Ttc14	1.27	67	5.72	97	7.25	
3437	Lsm6	1.27	15	3.93	28	4.98	
3438	Ptpn9	1.27	249	19.58	435	24.82	
3439	Sec63	1.27	302	15.57	482	19.73	
3440	Eif4g1	1.27	22	57.93	35	73.43	
3441	Cog6	1.27	192	19.95	346	25.29	
3442	RGD1560175	1.27	83	4.15	145	5.26	
3443	Card6	1.27	183	9.68	307	12.27	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3444	Focad	1.27	90	2.98	156	3.77	
3445	Kansl3	1.27	286	18.75	470	23.76	
3446	Apaf1	1.27	142	7.78	262	9.85	
3447	Ttc3	1.27	625	26.66	1105	33.77	
3448	Pola1	1.27	71	2.45	104	3.1	
3449	Champ1	1.27	134	11.02	215	13.95	
3450	Dnajc8	1.27	116	22.92	205	29.03	
3451	Wdr43	1.27	124	10.34	208	13.1	
3452	Zfp526	1.27	61	4.61	103	5.84	
3453	Nktr	1.27	322	15.78	580	19.97	
3454	Kmt2c	1.27	25	9.15	37	11.57	
3455	Ppil4	1.27	80	7.99	129	10.11	
3456	Zbtb11	1.27	80	4.82	129	6.1	
3457	Dusp11_2	1.27	0	4.17	0	5.27	
3458	Ftsj3	1.27	81	9.9	135	12.52	
3459	Glod4	1.27	102	19.38	160	24.52	
3460	Impad1	1.27	2	13.86	3	17.54	
3461	Itpkb	1.27	97	5.98	155	7.57	
3462	Mapk1ip1	1.27	39	9.97	66	12.61	
3463	Mitd1	1.27	17	3.38	31	4.28	
3464	Papolg	1.27	66	5.05	108	6.39	
3465	Prdm5	1.27	60	1.22	85	1.55	
3466	RGD1563888	1.27	43	5.18	91	6.55	
3467	Zfp853	1.27	16	1.9	30	2.41	
3468	Zmpste24	1.27	92	12.86	147	16.27	
3469	Krba1	1.26	209	11.34	355	14.35	
3470	Cbx1	1.26	75	44.12	135	55.79	
3471	Zmym2	1.26	234	15.53	393	19.64	
3472	Ccdc50	1.26	112	16.99	213	21.48	
3473	Acbd3	1.26	239	18.21	411	23.02	
3474	Rab12	1.26	80	20.61	135	26.04	
3475	G2e3	1.26	57	3.07	88	3.88	
3476	Cdc37	1.26	307	25.4	508	32.1	
3477	Atp8a1	1.26	72	3.27	86	4.13	
3478	Naa16	1.26	68	2.86	104	3.62	
3479	Gss	1.26	47	5.58	75	7.05	
3480	Rps11	1.26	484	293.32	795	370.49	
3481	Cd63	1.26	392	125.64	662	158.65	
3482	Tbck	1.26	67	2.64	124	3.33	
3483	Golph3l	1.26	83	6.6	126	8.33	
3484	Kif1c	1.26	310	23.06	524	29.1	
3485	Ezh1	1.26	82	6.57	143	8.29	
3486	Hmg20a	1.26	227	16.92	373	21.35	
3487	Akr1c3	1.26	38	9.54	56	12.03	
3488	Cep295	1.26	89	2.26	133	2.86	
3489	Cyb5r1	1.26	20	3.16	32	3.99	
3490	Gtf2h5_1	1.26	32	7	53	8.83	
3491	MGC109340_1	1.26	27	15.27	49	19.26	
3492	Rassf4	1.26	125	16.81	234	21.21	
3493	RGD1308923	1.26	24	4.57	33	5.76	
3494	Glyr1	1.26	326	29.98	540	37.83	
3495	Dcp1a	1.26	206	8.22	330	10.37	
3496	Mlxip	1.26	119	7.93	228	10	
3497	Baz1a	1.26	96	5.55	166	7	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3498	Wbscr16	1.26	46	5.02	76	6.33	
3499	Smarcc2	1.26	378	29.33	610	36.95	
3500	Cd99	1.26	87	37.81	140	47.63	
3501	Irf2bpl	1.26	73	11.25	123	14.17	
3502	Plod2	1.26	4175	392.73	7169	494.65	
3503	Acvr2a	1.26	59	6.07	91	7.65	
3504	Spsb2_1	1.26	3	5.67	4	7.14	
3505	Tfpt	1.26	48	6	79	7.56	
3506	Tmem254	1.26	41	9.96	65	12.54	
3507	Akna	1.26	28	1.29	39	1.62	
3508	Ddx55	1.26	16	2.94	23	3.7	
3509	Eef2k	1.26	99	5.39	164	6.79	
3510	Hmbox1	1.26	232	10.61	304	13.36	
3511	Ptpmt1	1.26	27	4.22	37	5.32	
3512	Txndc16	1.26	29	2.8	57	3.52	
3513	Yars2	1.26	27	4.4	41	5.54	
3514	Nipbl	1.26	409	14.88	651	18.74	
3515	Cops2	1.26	206	18.05	342	22.72	
3516	Hprt1_2	1.26	43	34.64	67	43.6	
3517	Rusc2	1.26	225	16.63	370	20.93	
3518	Tjap1	1.26	145	12.27	240	15.44	
3519	Gabpa	1.26	91	6.37	155	8.02	
3520	Dars	1.26	157	17.5	230	22.01	
3521	Creb3	1.26	218	49.79	367	62.61	
3522	Vps35	1.26	326	34.6	541	43.5	
3523	Bptf	1.26	438	13.23	718	16.63	
3524	Hnrnpa2b1	1.26	429	170.33	686	214.01	
3525	Sltm	1.26	216	11.84	365	14.87	
3526	Rbm25l1	1.26	140	18.12	228	22.76	
3527	Gapvd1	1.26	323	18.57	552	23.32	
3528	Fras1	1.26	37	0.78	58	0.98	
3529	Sept5	1.26	26	2.44	50	3.07	
3530	Ubr5	1.26	664	30.53	1126	38.34	
3531	Rnf38	1.26	126	15.74	234	19.76	
3532	Mrrf	1.26	61	5.37	110	6.74	
3533	Ralgps2	1.26	72	7.79	115	9.79	
3534	Fam175b	1.25	93	9.58	156	12.02	
3535	Mocs1	1.25	80	6.42	93	8.06	
3536	Msl2	1.25	72	8.98	116	11.26	
3537	Nadsyn1	1.25	49	3.78	71	4.75	
3538	Sema5a	1.25	4382	138.85	7501	174.24	
3539	Pla2g7	1.25	382	69.82	684	87.61	
3540	Prr13	1.25	387	141.35	673	177.35	
3541	Arel1	1.25	204	11.68	337	14.65	
3542	Cep170b	1.25	186	9.36	318	11.74	
3543	Ugp2	1.25	73	10.03	133	12.59	
3544	Cdc123	1.25	145	24.97	253	31.32	
3545	Pcdhgb5	1.25	29	4.68	44	5.87	
3546	Tbc1d22b	1.25	71	7.73	125	9.69	
3547	Dmxl2	1.25	38	1.06	65	1.34	
3548	Pitpnb	1.25	190	27.4	334	34.35	
3549	Cdk5rap1	1.25	67	4.74	119	5.94	
3550	Slx1b	1.25	49	4.02	75	5.04	
3551	Cd200	1.25	242	34.02	401	42.63	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3552	Atrnl1	1.25	111	3.66	160	4.59	
3553	Pmpcb	1.25	237	49.09	394	61.51	
3554	Rmnd5a	1.25	98	19.77	171	24.78	
3555	Arl6ip6	1.25	68	7.83	107	9.8	
3556	Csrnp1	1.25	48	4.51	65	5.65	
3557	LOC100911779	1.25	35	9.44	53	11.83	
3558	Taf6l	1.25	55	6.65	76	8.32	
3559	Ncl	1.25	235	52.73	339	66.05	
3560	Dennd5a	1.25	484	33.94	839	42.52	
3561	Mcm10	1.25	47	3.09	79	3.86	
3562	Ubxn4	1.25	380	33.1	655	41.44	
3563	Fzd4	1.25	89	4.71	148	5.89	
3564	Hars2	1.25	67	4.9	85	6.14	
3565	RGD1309540	1.25	159	11.99	238	15	
3566	Gprasp2	1.25	106	13.32	178	16.66	
3567	Hsdl2	1.25	70	9.92	123	12.4	
3568	Gpx8	1.25	119	38.53	208	48.17	
3569	RGD1304694	1.25	126	13.42	214	16.78	
3570	Apmap	1.25	79	10.11	130	12.63	
3571	Sparc	1.25	1313	230.61	2216	288.14	
3572	Memo1	1.25	204	22.48	350	28.07	
3573	RGD1564420	1.25	198	15.83	334	19.77	
3574	Foxk2	1.25	272	15.12	410	18.88	
3575	Mapkap1	1.25	160	10.31	286	12.88	
3576	Rhot1	1.25	222	6.75	353	8.43	
3577	Purb	1.25	139	20.48	232	25.55	
3578	Lars	1.25	211	15.86	341	19.79	
3579	Son	1.25	1887	68.66	3165	85.62	
3580	AABR07044933.1	1.25	1	2.11	1	2.62	
3581	AABR07054264.1	1.25	3	5.66	5	7.05	
3582	AABR07055826.1	1.25	1	0.47	3	0.58	
3583	Ankra2	1.25	0	2.8	1	3.49	
3584	Apom	1.25	3	1.1	6	1.37	
3585	C2_2	1.25	1	0.83	2	1.04	
3586	Casc1	1.25	41	0.84	27	1.05	
3587	Chrn4	1.25	4	0.42	6	0.53	
3588	Clec2j	1.25	4	2.06	15	2.56	
3589	Csnk1g3	1.25	70	10.48	125	13.06	
3590	Ddx18	1.25	78	12.14	128	15.12	
3591	Ebf2	1.25	9	0.4	20	0.5	
3592	Emc2	1.25	33	4.88	40	6.08	
3593	Erb3	1.25	2	0.18	5	0.23	
3594	Gprc5a	1.25	3	0.52	7	0.65	
3595	Guf1	1.25	35	1.58	61	1.97	
3596	Hmgn1	1.25	145	65.3	214	81.37	
3597	Ifit1lb	1.25	12	0.48	12	0.6	
3598	Igf2bp2	1.25	5	0.3	11	0.38	
3599	Kif14	1.25	18	0.65	24	0.81	
3600	Lcmt2	1.25	20	3.58	35	4.46	
3601	LOC689959	1.25	4	0.81	9	1	
3602	LOC691931	1.25	5	1.52	11	1.89	
3603	Mcm9	1.25	92	2.67	142	3.33	
3604	Mob2	1.25	56	10.04	96	12.51	
3605	Mon1a	1.25	41	4.18	95	5.21	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3606	Morn1	1.25	70	1.05	78	1.31	
3607	Ntng1	1.25	23	0.81	33	1.01	
3608	Nxph3	1.25	3	0.58	6	0.73	
3609	Pcdhb12	1.25	7	1.08	14	1.34	
3610	Pdzd8	1.25	149	6.35	245	7.91	
3611	Pkmyt1	1.25	11	1.88	23	2.34	
3612	Ppargc1b	1.25	7	0.33	17	0.41	
3613	RGD1559972	1.25	0	2.51	1	3.13	
3614	RGD1561161	1.25	140	4.89	240	6.09	
3615	Rn60_17_0530.1	1.25	28	16.04	50	19.98	
3616	Rn60_4_1361.1	1.25	0	0.51	0	0.63	
3617	Rn60_X_0635.3	1.25	3	1.07	5	1.34	
3618	Sdr42e1	1.25	6	0.42	10	0.52	
3619	Snupn	1.25	93	4.07	144	5.08	
3620	Strada	1.25	203	20.32	332	25.32	
3621	Thoc6	1.25	28	8.99	42	11.2	
3622	Tom1l1	1.25	38	3.33	42	4.15	
3623	Trmt11	1.25	25	2.08	41	2.59	
3624	Tsen2	1.25	52	2.05	70	2.55	
3625	Tsga10	1.25	18	0.4	27	0.5	
3626	Usp16	1.25	85	7.91	146	9.85	
3627	Usp29	1.25	12	0.52	23	0.64	
3628	Wnk2	1.25	20	0.16	14	0.2	
3629	Xkr4	1.25	55	1.12	87	1.39	
3630	Zfp867	1.25	9	2.37	15	2.95	
3631	Zkscan2	1.25	7	0.33	13	0.41	
3632	AABR07006333.1	1.25	3	1.73	5	2.16	
3633	AABR07030529.1	1.25	3	7.49	5	9.33	
3634	AABR07038021.1	1.25	4	0.7	8	0.87	
3635	AABR07043098.1	1.25	4	1.37	6	1.7	
3636	AABR07050391.2	1.25	0	9.01	0	11.22	
3637	Acvr2b	1.25	25	3.03	42	3.78	
3638	Arl3	1.25	100	12.81	158	15.96	
3639	Ccdc17	1.25	14	1.48	21	1.85	
3640	Ccdc64	1.25	8	0.32	12	0.4	
3641	Cystm1	1.25	43	23.33	79	29.07	
3642	Fam118b	1.25	62	5.94	117	7.4	
3643	Fibin	1.25	30	4.78	50	5.96	
3644	Ldb3	1.25	10	0.36	32	0.45	
3645	LOC100910771	1.25	0	1.56	0	1.94	
3646	Lsm11	1.25	13	2.85	28	3.55	
3647	Mafb	1.25	17	3.41	30	4.25	
3648	Mlkl	1.25	19	1.72	32	2.14	
3649	Pcdhb13	1.25	3	0.45	5	0.57	
3650	Plxna4a	1.25	18	0.38	23	0.48	
3651	Prr16	1.25	3	0.39	5	0.49	
3652	Rpl32_2	1.25	0	4.83	0	6.02	
3653	Sass6_1	1.25	4	1.67	6	2.08	
3654	Sdsl	1.25	9	1.58	15	1.96	
3655	SNORD113_21	1.25	0	11.43	0	14.25	
3656	SNORD36_3	1.25	0	30.6	0	38.13	
3657	Snx32	1.25	8	1.79	17	2.23	
3658	Taf9b	1.25	18	1.64	31	2.04	
3659	Tap2_1	1.25	0	2.69	1	3.35	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3660	Tnfsf12	1.25	9	2.12	20	2.64	
3661	Trim69	1.25	3	0.22	6	0.27	
3662	Triqk	1.25	13	2.84	25	3.54	
3663	Ubn2	1.25	261	12.14	397	15.12	
3664	Zfp961	1.25	10	2.57	19	3.2	
3665	Znrf1	1.25	53	7.53	111	9.38	
3666	Ctnna1	1.25	615	62.24	986	77.53	
3667	Tmem127	1.25	270	23.61	427	29.39	
3668	Ifnar1	1.25	301	24.1	495	30	
3669	Mapre1	1.24	236	34.97	398	43.54	
3670	Strip1	1.24	195	16.69	314	20.77	
3671	Ddx1	1.24	278	38.35	476	47.71	
3672	Zc3h7a	1.24	195	11.17	330	13.9	
3673	Rtn3	1.24	521	35.58	862	44.26	
3674	Rimklb	1.24	59	32.86	100	40.87	
3675	Eml4	1.24	139	7.68	224	9.56	
3676	Optn	1.24	282	15.67	480	19.48	
3677	Cct8	1.24	317	42.66	534	53.04	
3678	LOC100911766	1.24	11	9.9	22	12.31	
3679	Fnbp1l	1.24	142	10.18	251	12.65	
3680	Nfat5	1.24	415	9.98	685	12.41	
3681	Tcp1	1.24	253	45.6	418	56.7	
3682	Tiam2	1.24	122	5.34	215	6.63	
3683	Ubn1	1.24	295	14.13	494	17.57	
3684	Adss	1.24	100	11.84	154	14.71	
3685	Tcf4	1.24	413	20.71	807	25.74	
3686	Leng8	1.24	386	24.23	633	30.11	
3687	Synrg	1.24	159	13.76	296	17.11	
3688	Golph3	1.24	159	21.4	278	26.59	
3689	Nek9	1.24	298	33.89	500	42.1	
3690	Kmt2a	1.24	313	9.36	524	11.62	
3691	Exoc5	1.24	139	9.37	237	11.63	
3692	Golga1	1.24	93	4.52	161	5.61	
3693	Npm1	1.24	183	61.21	280	75.99	
3694	Fgd1	1.24	32	5.56	45	6.9	
3695	Tpcn1	1.24	108	8.43	166	10.46	
3696	Gucy1a3	1.24	556	34.34	925	42.61	
3697	Dnajb2	1.24	159	18.12	241	22.49	
3698	Ddah1	1.24	1261	111.67	2233	138.42	
3699	Lrrc45	1.24	47	3.57	76	4.43	
3700	Myo6	1.24	283	11.91	483	14.75	
3701	Ash1l	1.24	583	13.59	990	16.84	
3702	Cspp1	1.24	158	6.25	273	7.74	
3703	Cep131	1.24	46	3.43	78	4.25	
3704	Pola2	1.24	40	4.81	66	5.96	
3705	Scaper	1.24	247	4.6	282	5.7	
3706	AABR07051787.1	1.24	26	3.69	40	4.57	
3707	Tp53bp2	1.24	109	7.94	182	9.83	
3708	Foxo1	1.24	3231	346.79	5698	429.3	
3709	Slc8a1	1.24	124	7.31	235	9.05	
3710	Brca1	1.24	42	1.58	70	1.95	
3711	Fam179b	1.24	203	7.97	308	9.87	
3712	Pea15	1.24	43	9.11	59	11.28	
3713	Rbak	1.24	37	2.97	58	3.67	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3714	Supt6h	1.24	680	34.82	1139	43.09	
3715	Usp25	1.24	151	10.81	244	13.38	
3716	Ppig	1.24	139	9.69	237	11.99	
3717	Dnajc14	1.24	161	17.14	268	21.21	
3718	Kansl1	1.24	274	22.29	463	27.58	
3719	Fzd6	1.24	162	11.72	272	14.49	
3720	Stat1	1.24	232	10.04	403	12.41	
3721	Map9	1.24	55	3.03	89	3.75	
3722	Ccdc88c	1.24	46	1.04	66	1.28	
3723	Galc	1.24	23	3.84	33	4.75	
3724	Mier3	1.24	121	7.76	194	9.59	
3725	Rbm18	1.24	112	13.91	187	17.19	
3726	Mta3	1.24	312	26.26	525	32.43	
3727	Ptpn3	1.24	43	1.1	77	1.35	
3728	Vps37c	1.24	67	5.88	106	7.26	
3729	Nmd3	1.24	65	8.99	104	11.11	
3730	Socs6	1.24	56	5.66	115	6.99	
3731	R3hdm1	1.24	973	49.91	1565	61.65	
3732	Cap1	1.23	845	118.8	1400	146.66	
3733	Bre	1.23	131	10.16	196	12.55	
3734	Hs6st1	1.23	736	56.49	1273	69.72	
3735	Rab6a	1.23	338	30.72	554	37.91	
3736	Wwtr1	1.23	231	35.83	479	44.21	
3737	Clcc1	1.23	72	6.11	121	7.54	
3738	Ppp1r13l	1.23	21	2.92	35	3.6	
3739	Tamm41	1.23	48	6.09	92	7.51	
3740	Tsc22d4_2	1.23	0	6.08	0	7.5	
3741	Zbtb49	1.23	45	2.6	61	3.2	
3742	Ctnn_1	1.23	0	19.05	0	23.5	
3743	Iars	1.23	101	7.58	169	9.35	
3744	Rfx3	1.23	68	2.01	112	2.48	
3745	Nf1	1.23	377	9.74	604	12.02	
3746	Akap8l	1.23	106	9.88	188	12.18	
3747	Mob1a	1.23	258	21.78	413	26.85	
3748	Dtnbp1	1.23	123	12.65	168	15.59	
3749	Etv6	1.23	343	20.99	631	25.87	
3750	Sept8	1.23	165	10.06	277	12.4	
3751	Xrn2	1.23	281	25.12	485	30.96	
3752	Ice1	1.23	287	13.73	494	16.91	
3753	AABR07058985.1	1.23	19	6.03	30	7.43	
3754	Myo5a	1.23	82	4.21	126	5.19	
3755	Renbp	1.23	24	4.76	37	5.86	
3756	Gadd45g	1.23	17	5.65	29	6.95	
3757	Kcnab1	1.23	208	5.29	266	6.52	
3758	Vamp1	1.23	18	2.34	33	2.88	
3759	Zfp868	1.23	48	9.68	82	11.92	
3760	Mtmr3	1.23	428	19.53	713	24.05	
3761	Pprc1	1.23	206	13.35	342	16.43	
3762	Ubp1	1.23	201	19.16	315	23.58	
3763	Myef2	1.23	208	16.65	290	20.48	
3764	Rad21	1.23	510	51.42	840	63.26	
3765	LOC100910143	1.23	0	2.13	0	2.63	
3766	Mrto4	1.23	35	8.28	62	10.19	
3767	Otulin	1.23	9	7.77	20	9.55	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3768	Zcchc6	1.23	171	8.57	294	10.54	
3769	Fam208a	1.23	166	7.98	264	9.81	
3770	Prkcdbp	1.23	76	21.46	126	26.39	
3771	Zfp263	1.23	53	6.68	88	8.21	
3772	Eif5b	1.23	56	14.91	88	18.33	
3773	Rsrc2	1.23	121	14.88	223	18.28	
3774	Socs5	1.23	103	7.44	157	9.14	
3775	Pdcd6ip	1.23	398	23.27	669	28.59	
3776	Psmc7	1.23	164	32.6	267	40.06	
3777	Pcmdt2	1.23	201	14.6	355	17.93	
3778	Mpg	1.23	31	4.18	30	5.13	
3779	Slc38a9	1.23	70	2.26	108	2.78	
3780	Tprg1l	1.23	198	39.12	327	48.05	
3781	Cops7b	1.23	53	8.12	84	9.97	
3782	Fastkd1	1.23	36	2.85	69	3.5	
3783	Terf1	1.23	63	2.51	96	3.08	
3784	Ubt1	1.23	26	2.73	31	3.36	
3785	Zbtb26	1.23	47	4.57	68	5.61	
3786	Fmnl1	1.23	13	1.31	26	1.61	
3787	Hepacam	1.23	18	4.04	34	4.96	
3788	Ptpre	1.23	483	40.47	857	49.69	
3789	Kpnb1	1.23	756	47.45	1240	58.25	
3790	Clasrp	1.23	147	12.54	235	15.39	
3791	Hax1	1.23	54	17.2	92	21.1	
3792	Lin7c	1.23	53	23.52	91	28.86	
3793	Rcn2	1.23	336	56.12	561	68.85	
3794	Sh3bp5l	1.23	111	12.68	180	15.56	
3795	Stk25	1.23	231	37.24	374	45.68	
3796	Herc2	1.23	465	9.6	738	11.77	
3797	Dpysl2	1.23	1070	148.14	1819	181.69	
3798	Kdm6a	1.23	380	20.26	655	24.85	
3799	Fdps	1.23	797	83.93	1286	102.94	
3800	Gabpb1	1.23	183	16.54	318	20.28	
3801	Fryl	1.23	471	12.99	766	15.93	
3802	Lancl1	1.23	164	10.37	263	12.72	
3803	Alg1	1.23	30	4.98	50	6.11	
3804	Ccdc112	1.23	39	4.08	57	5	
3805	Dr1_1	1.23	2	9.03	2	11.07	
3806	Thg1l	1.23	33	3.89	49	4.77	
3807	Usp38	1.23	93	6.18	143	7.57	
3808	Ankrd13c	1.23	197	18.5	325	22.68	
3809	MGC94335	1.23	39	9.46	75	11.59	
3810	Mios	1.23	38	2.95	64	3.61	
3811	Taf4a	1.23	76	6.83	104	8.37	
3812	Fkbp9	1.23	472	54.72	772	67.04	
3813	Evc	1.22	72	4.87	113	5.96	
3814	Nod1	1.22	65	5.08	113	6.22	
3815	Pld2	1.22	76	7.51	136	9.2	
3816	Lrig1	1.22	93	8.57	157	10.49	
3817	Cyb5r3	1.22	185	34.13	304	41.77	
3818	Rgs12	1.22	129	5.44	216	6.66	
3819	Cat	1.22	248	32.23	407	39.45	
3820	Cep290	1.22	35	0.88	44	1.07	
3821	Dtwd2	1.22	21	2.21	33	2.7	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3822	Hemk1	1.22	18	2.27	22	2.77	
3823	Oscp1	1.22	334	2.54	183	3.11	
3824	Veph1	1.22	51	1.13	77	1.38	
3825	Ccnc	1.22	61	4.74	101	5.8	
3826	Gnl2	1.22	107	7.72	177	9.45	
3827	Rab11fip1	1.22	216	9.64	363	11.8	
3828	Rbbp5	1.22	83	6.2	148	7.59	
3829	Rpp40	1.22	17	2.9	23	3.55	
3830	Scaf4	1.22	194	8.06	285	9.86	
3831	Sgk3	1.22	29	2.67	47	3.27	
3832	Hnrnp1	1.22	590	50.62	971	61.92	
3833	Axl	1.22	390	29.82	646	36.47	
3834	N4bp1	1.22	175	9.94	289	12.15	
3835	Flywch1	1.22	146	10.51	226	12.85	
3836	Rbms2	1.22	131	22.9	245	28	
3837	Ubap2l	1.22	648	45.17	1068	55.22	
3838	Brox	1.22	172	16.04	282	19.61	
3839	Sike1	1.22	66	9.6	113	11.74	
3840	Taf15	1.22	316	21.48	461	26.25	
3841	Cdk5rap2	1.22	205	9.31	296	11.38	
3842	Fbxl5	1.22	137	11.97	242	14.62	
3843	Mtx1	1.22	154	13.86	219	16.94	
3844	Ppp1r11	1.22	94	17.53	159	21.42	
3845	Mapkapk5	1.22	109	16.83	176	20.56	
3846	Ahctf1	1.22	228	8.35	364	10.2	
3847	Atp10a	1.22	46	2.13	70	2.6	
3848	Ppp2r2a	1.22	373	37.01	657	45.19	
3849	Cdr2	1.22	33	4.62	60	5.65	
3850	Diaph1	1.22	413	21.71	647	26.5	
3851	Noc3l	1.22	56	6.04	104	7.38	
3852	Xbp1	1.22	285	79.49	476	97.02	
3853	LOC100233176	1.22	59	9.46	75	11.55	
3854	Anapc7	1.22	119	12.82	197	15.64	
3855	Akirin2	1.22	116	21.1	185	25.75	
3856	Clock	1.22	139	4.81	231	5.86	
3857	Btbd7	1.22	234	16.77	395	20.46	
3858	Ing3	1.22	46	6.38	72	7.78	
3859	Gtpbp2	1.22	98	7.61	148	9.28	
3860	Phip	1.22	206	11.73	351	14.31	
3861	Ppp1r15a	1.22	104	15.41	168	18.79	
3862	Cmpk1	1.22	109	17	161	20.72	
3863	Ksr1	1.22	88	3.99	124	4.87	
3864	Gnrhr	1.22	1159	137.62	1945	167.7	
3865	Cnbd2	1.22	503	3.12	657	3.81	
3866	Plekho1	1.22	68	13.66	113	16.65	
3867	Micu2	1.22	289	17.88	492	21.78	
3868	Rab11fip5	1.22	155	11.46	261	13.96	
3869	Cmtm3	1.22	113	23.63	183	28.77	
3870	Zfp189	1.22	36	4.27	57	5.2	
3871	Cul4b	1.22	155	14.02	266	17.07	
3872	Pdcl	1.22	76	14.29	123	17.39	
3873	Thoc7	1.22	140	21.33	226	25.96	
3874	Sel1l	1.22	466	25.22	765	30.7	
3875	Fcho2	1.22	157	7.75	281	9.43	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3876	Pbrm1	1.22	343	17.62	553	21.43	
3877	Heatr5a	1.22	284	11.08	477	13.48	
3878	Morf4l1	1.22	150	93.87	208	114.18	
3879	Mdn1	1.22	248	4.14	391	5.03	
3880	Ankrd46	1.22	155	24.26	253	29.5	
3881	Tceb1	1.22	59	11.82	97	14.38	
3882	Fam168b	1.22	551	45.6	888	55.43	
3883	Atxn7	1.21	78	5.17	123	6.29	
3884	Cwc25	1.21	57	5.43	100	6.6	
3885	Fam213a	1.21	21	3.68	37	4.47	
3886	Limch1	1.21	51	2.22	79	2.69	
3887	LOC100910121	1.21	240	21.61	388	26.25	
3888	Npr2	1.21	318	27.51	531	33.42	
3889	Nthl1	1.21	13	2.45	15	2.98	
3890	Prmt10	1.21	126	10.49	175	12.74	
3891	RGD1564171	1.21	17	4.55	23	5.53	
3892	Rpusd3	1.21	24	4.12	37	5	
3893	Scfd2	1.21	37	2.48	76	3.01	
3894	Sh3bp2	1.21	18	2.03	30	2.46	
3895	Tarsl2	1.21	14	1.51	21	1.84	
3896	Fam206a	1.21	9	2.98	16	3.62	
3897	Jazf1	1.21	55	3.97	76	4.83	
3898	Ppp2r2d	1.21	99	11.86	150	14.41	
3899	Sh2b2	1.21	11	1.03	21	1.25	
3900	Slc3a1	1.21	45	1.23	33	1.5	
3901	Tspan18	1.21	16	0.78	27	0.95	
3902	Capza1	1.21	251	26.5	425	32.19	
3903	Carm1	1.21	188	18.62	292	22.61	
3904	Arpc2	1.21	431	54.44	734	66.09	
3905	Uso1	1.21	271	22.03	461	26.75	
3906	Dnajb6	1.21	143	12.57	264	15.25	
3907	Mms19	1.21	113	8.03	160	9.75	
3908	Ppp1r15b	1.21	282	19.1	470	23.18	
3909	Rims2	1.21	148	2.97	242	3.61	
3910	Dbnl	1.21	150	20.51	232	24.89	
3911	Anapc4	1.21	187	15.44	324	18.74	
3912	N4bp2l2	1.21	126	19.35	193	23.48	
3913	Scpep1	1.21	222	33.76	352	40.95	
3914	Aggf1	1.21	69	7.57	114	9.18	
3915	Kat6b	1.21	222	7.76	353	9.41	
3916	Slc4a7	1.21	169	10.35	282	12.55	
3917	Dmxl1	1.21	198	5.92	320	7.18	
3918	Lsm14a	1.21	249	23.14	402	28.05	
3919	Pdk3	1.21	50	5.96	72	7.23	
3920	Telo2	1.21	113	9.1	164	11.03	
3921	Satb1	1.21	193	12.61	315	15.29	
3922	Dnttip2	1.21	102	13.58	161	16.46	
3923	Rab18	1.21	169	39.54	269	47.92	
3924	lpo7	1.21	226	14.67	371	17.78	
3925	Fkbp2	1.21	27	16.59	59	20.1	
3926	Rgp1	1.21	150	8.73	192	10.58	
3927	Wipi1	1.21	148	20.41	216	24.72	
3928	Rars	1.21	145	21.94	226	26.57	
3929	Kat6a	1.21	376	14.6	615	17.67	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3930	Ccdc149	1.21	48	4.01	66	4.85	
3931	Pvrl1	1.21	179	11.67	291	14.12	
3932	Tmem33	1.21	164	10.33	267	12.5	
3933	Eogt	1.21	113	8.02	170	9.71	
3934	Rb1	1.21	155	8.8	262	10.64	
3935	Taok2	1.21	314	15.09	455	18.26	
3936	Med28	1.21	59	9.53	93	11.53	
3937	C4a_2	1.21	10	5.91	12	7.14	
3938	LOC361646	1.21	126	4.63	206	5.6	
3939	Baz2b	1.21	347	11.22	537	13.56	
3940	Elk4	1.21	155	12.81	252	15.49	
3941	Clk1	1.21	358	47.96	571	57.98	
3942	Phkb	1.21	180	6.4	262	7.73	
3943	Plekha7	1.21	164	5.79	257	6.99	
3944	Ei24	1.21	171	28.64	269	34.61	
3945	Os9	1.21	277	35.48	452	42.86	
3946	Arhgap1	1.21	347	39.19	569	47.35	
3947	Ipo9	1.21	328	26.14	532	31.57	
3948	Paqr3	1.21	24	2.53	37	3.06	
3949	Rpp38	1.21	17	3.95	23	4.76	
3950	Gli3	1.21	158	7.48	259	9.03	
3951	Ldlrap1	1.21	27	5.11	46	6.17	
3952	Rrp15	1.21	31	5.43	46	6.55	
3953	Slc37a3	1.21	208	22.47	321	27.13	
3954	Smn1	1.21	58	9.83	97	11.88	
3955	Tsr3	1.21	11	3.31	17	3.99	
3956	Zfp277	1.21	221	16.66	393	20.12	
3957	Midn	1.21	366	38.21	586	46.13	
3958	Pik3c2a	1.21	251	8.36	404	10.09	
3959	Zmym4	1.21	261	9.56	434	11.54	
3960	Arhgap23	1.21	253	12.66	419	15.29	
3961	Rnase4	1.21	11	18.29	15	22.07	
3962	Sptlc2	1.21	76	10.97	135	13.24	
3963	Gigyf2	1.21	227	7.84	351	9.46	
3964	Pip4k2a	1.21	169	17.34	281	20.91	
3965	Cep44	1.21	147	20.4	221	24.61	
3966	Parp4	1.21	164	11.43	261	13.79	
3967	Hgs	1.21	287	26.56	447	32.04	
3968	Smim7	1.21	111	29.94	173	36.11	
3969	Caprin1	1.21	857	77.45	1366	93.41	
3970	Ick	1.21	93	7.16	135	8.63	
3971	Smg1	1.21	464	13.18	728	15.89	
3972	Dpyd	1.21	126	4.07	242	4.91	
3973	Ptk2	1.21	288	19.52	482	23.53	
3974	Krr1	1.2	47	7.86	74	9.47	
3975	Rab2b	1.2	73	11.33	104	13.65	
3976	Tubb6	1.2	57	11.17	95	13.45	
3977	AC103129.3	1.2	5	3.35	6	4.04	
3978	Knop1_2	1.2	31	10.11	53	12.18	
3979	Mfsd9	1.2	21	2.08	32	2.5	
3980	Taf5	1.2	24	2.01	52	2.42	
3981	Srfbp1	1.2	95	5.96	157	7.18	
3982	Pgap1	1.2	50	4.57	85	5.5	
3983	Snrpd3	1.2	83	40.62	145	48.88	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
3984	Brwd3	1.2	76	4.29	129	5.16	
3985	Cept1	1.2	108	10.93	172	13.15	
3986	Rabgap1	1.2	429	23.1	699	27.8	
3987	Ssu72	1.2	154	22.32	205	26.86	
3988	Nbn	1.2	120	11.76	178	14.15	
3989	Stxbp1	1.2	91	8.73	157	10.5	
3990	Prpf18	1.2	215	7.75	370	9.33	
3991	Adh4	1.2	173	11.11	277	13.37	
3992	Ccdc88a	1.2	109	5.26	187	6.32	
3993	Cdadc1	1.2	38	6.45	63	7.76	
3994	Lrsam1	1.2	37	3.81	64	4.58	
3995	Mast2	1.2	413	20.99	739	25.24	
3996	Synpo	1.2	265	23.76	441	28.57	
3997	Zdhhc5	1.2	225	28.65	372	34.46	
3998	Eed	1.2	78	9.17	117	11.03	
3999	Ift172	1.2	60	3.6	102	4.33	
4000	Map3k7	1.2	3	8.13	6	9.78	
4001	Gabbr1	1.2	210	12.47	322	14.99	
4002	Nsmaf	1.2	133	9.17	196	11.02	
4003	Peg12	1.2	28	3.89	45	4.68	
4004	Pink1	1.2	116	16.83	187	20.22	
4005	Nf2	1.2	361	18.48	620	22.21	
4006	Tmx3	1.2	78	16	130	19.22	
4007	Lpin1	1.2	89	7.73	144	9.29	
4008	Rbm34	1.2	55	4.17	85	5	
4009	Cenpc	1.2	46	3.97	99	4.76	
4010	Ctns	1.2	50	6.85	92	8.22	
4011	Eya3	1.2	410	29.72	665	35.66	
4012	Tspan12	1.2	51	5.42	82	6.51	
4013	Atat1	1.2	172	9.95	243	11.94	
4014	Dnajb5	1.2	41	4.47	68	5.37	
4015	Rad50	1.2	141	8.33	212	9.99	
4016	Cacna2d1	1.2	247	7.21	293	8.65	
4017	Sbno2	1.2	197	8.47	319	10.16	
4018	Clip2	1.2	122	7.27	214	8.71	
4019	Armcx1_2	1.2	9	9.03	15	10.83	
4020	LOC690468	1.2	16	63.33	25	75.94	
4021	Sh3rf1	1.2	92	3.72	129	4.46	
4022	LOC100910454	1.2	317	30.14	527	36.14	
4023	Zfp292	1.2	271	8.25	437	9.89	
4024	Mycbp2	1.2	337	10.93	535	13.1	
4025	Nom1	1.2	91	9.39	131	11.25	
4026	Suv420h1	1.2	215	8.67	310	10.39	
4027	Cc2d1a	1.2	120	11.5	209	13.78	
4028	Ssb	1.2	96	23.84	158	28.55	
4029	Abl1	1.2	175	26.58	322	31.83	
4030	Ifi2712b	1.2	125	98.75	207	118.24	
4031	Ilk	1.2	405	84.31	653	100.94	
4032	Ddx31	1.2	52	2.18	97	2.61	
4033	Figl1	1.2	6	0.63	8	0.75	
4034	Gpatch11	1.2	30	2.26	48	2.71	
4035	SNORD25	1.2	5	25.86	8	30.94	
4036	AABR07045680.1	1.2	14	4.55	17	5.45	
4037	AC108574.2	1.2	94	11.63	144	13.91	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4038	Acd	1.2	42	18.42	65	22.03	
4039	Acsm3	1.2	21	0.71	28	0.85	
4040	Adal	1.2	7	1.13	10	1.35	
4041	Ccrn4l	1.2	10	1.39	16	1.66	
4042	Cd302	1.2	10	1.5	12	1.79	
4043	Col4a6	1.2	12	0.37	11	0.44	
4044	Cpeb3	1.2	51	0.68	60	0.81	
4045	Dlg1	1.2	244	12.39	376	14.82	
4046	Efcab2	1.2	49	0.65	65	0.77	
4047	Enthd2	1.2	49	5.88	83	7.03	
4048	Fam102b	1.2	31	5.95	58	7.11	
4049	Fam107b	1.2	19	1.73	31	2.06	
4050	Grik2	1.2	44	0.37	54	0.44	
4051	Itgb4	1.2	6	0.27	11	0.32	
4052	Kif1a	1.2	18	0.95	28	1.13	
4053	Krt18	1.2	5	1.32	9	1.58	
4054	Magee1	1.2	15	1.52	24	1.82	
4055	Mis12	1.2	20	11.66	32	13.95	
4056	Neil1	1.2	27	4.19	37	5.01	
4057	Nupl2	1.2	40	2.23	84	2.67	
4058	Pak7	1.2	23	0.42	27	0.5	
4059	Paxbp1	1.2	214	11.16	314	13.35	
4060	Ptgfr	1.2	5	0.6	8	0.72	
4061	Rel2	1.2	3	1.04	7	1.25	
4062	RGD1359108	1.2	32	5.02	42	6	
4063	Rp9	1.2	45	5.07	85	6.07	
4064	Sh3bgr	1.2	4	1.58	7	1.89	
4065	Slc25a18	1.2	8	0.92	10	1.1	
4066	Slc25a2	1.2	5	1.51	8	1.81	
4067	Slc30a7	1.2	67	8.91	106	10.66	
4068	Tmem168	1.2	88	13.83	133	16.55	
4069	Tmem170a	1.2	36	2.68	55	3.2	
4070	Tmem5	1.2	41	2.82	67	3.38	
4071	Tmlhe	1.2	50	4.85	76	5.81	
4072	Uxt	1.2	43	24.14	79	28.87	
4073	Zfp566	1.2	24	3.21	47	3.84	
4074	Efs	1.2	11	0.84	16	1.01	
4075	Gas7	1.2	11	0.67	14	0.8	
4076	Ogt	1.2	902	44.36	1425	53.05	
4077	Carhsp1	1.2	371	43.54	603	52.05	
4078	Dnaja2	1.2	178	30.93	285	36.97	
4079	Cltc	1.2	176	47	283	56.17	
4080	Tax1bp1	1.2	497	43	770	51.39	
4081	Zzef1	1.19	146	4.36	283	5.21	
4082	Ankrd17	1.19	609	17.96	956	21.46	
4083	Zfp91	1.19	218	14.01	339	16.73	
4084	Klf3	1.19	180	12.63	297	15.09	
4085	Trip4	1.19	138	6.7	193	8	
4086	Cpeb4	1.19	122	9.73	190	11.62	
4087	Nfic	1.19	85	16.66	135	19.89	
4088	Hiat1_1	1.19	38	24.18	54	28.87	
4089	Simc1	1.19	98	5.88	153	7.02	
4090	Eftud1	1.19	90	6.01	144	7.17	
4091	Snx13	1.19	91	6.72	131	8.03	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4092	R3hdm2	1.19	326	20.33	551	24.27	
4093	Nol7	1.19	73	9.67	100	11.54	
4094	Cct4	1.19	433	69.67	687	83.13	
4095	Rragc	1.19	164	21.67	267	25.86	
4096	Hspa4	1.19	801	59.28	1306	70.73	
4097	Ckap5	1.19	377	21.08	624	25.15	
4098	Rrp1	1.19	63	9.3	95	11.1	
4099	Gprasp1	1.19	174	9.83	289	11.73	
4100	Pik3r1	1.19	261	14.64	408	17.46	
4101	RGD1563812	1.19	60	35.36	100	42.18	
4102	Trit1	1.19	142	7.2	182	8.58	
4103	Usp22	1.19	308	47.5	491	56.65	
4104	Pnn	1.19	169	20.92	273	24.95	
4105	Dcun1d5	1.19	77	11.11	103	13.24	
4106	Limd2	1.19	127	40.48	210	48.23	
4107	Znrd1	1.19	39	13.74	55	16.38	
4108	Ctnnal1	1.19	295	21.26	515	25.33	
4109	Cdc73	1.19	86	10.32	140	12.3	
4110	Wdr48	1.19	198	16.21	327	19.31	
4111	Heatr5b	1.19	287	12.16	450	14.48	
4112	Arpc4	1.19	234	56.27	378	67.01	
4113	Oxr1	1.19	176	9.52	298	11.34	
4114	Fam98a	1.19	93	10.92	146	13	
4115	Manea	1.19	129	10.4	215	12.39	
4116	LOC100910717	1.19	515	25.2	807	30	
4117	Mtmr14	1.19	88	6.68	134	7.95	
4118	Nckap1	1.19	608	60.79	991	72.33	
4119	Cdk7	1.19	82	11.64	114	13.84	
4120	LOC100911865	1.19	19	2.42	21	2.88	
4121	Mrps18c	1.19	23	9.85	39	11.71	
4122	Pms1	1.19	37	2.68	75	3.19	
4123	Scg3	1.19	25	3.72	43	4.42	
4124	Sde2	1.19	99	9.89	157	11.76	
4125	Ywhaq	1.19	654	110.05	1064	130.9	
4126	Zfp39	1.19	584	1.94	733	2.31	
4127	Pikfyve	1.19	194	6.44	302	7.65	
4128	Dram2	1.19	114	15.78	208	18.76	
4129	Ube2g1	1.19	167	18.62	274	22.13	
4130	Ube2j1	1.19	123	27.62	201	32.83	
4131	Eil2	1.19	90	6.12	122	7.28	
4132	Fam13b	1.19	210	16.84	348	20.02	
4133	Ugdh	1.19	159	20.92	248	24.86	
4134	Tom1l2	1.19	233	13.55	378	16.1	
4135	Hiatl1	1.19	157	17.17	248	20.4	
4136	Nhlrc3	1.19	79	10.07	135	11.96	
4137	Ufc1	1.19	74	19.55	110	23.23	
4138	Clcn6	1.19	146	8.45	245	10.03	
4139	Klc1	1.19	194	17.68	357	21	
4140	Fhod3	1.19	764	36.45	1177	43.29	
4141	Herc1	1.19	310	6.59	506	7.82	
4142	Ralb	1.19	55	8.97	90	10.65	
4143	Abca16	1.19	54	1.24	76	1.47	
4144	Golga2	1.19	193	17.73	304	21.05	
4145	Rbfox2	1.19	205	10.2	357	12.11	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4146	Vhl	1.19	141	17.06	233	20.25	
4147	Esd	1.19	108	21.25	172	25.22	
4148	Hlhf	1.19	75	4.69	121	5.57	
4149	Meis1	1.19	680	28.92	1413	34.32	
4150	LOC100151767	1.19	83	9.67	150	11.47	
4151	Rbm33	1.19	172	13.38	278	15.88	
4152	Stxbp3	1.19	125	10.76	201	12.76	
4153	Vps13d	1.19	463	9.76	758	11.58	
4154	Ccnl2	1.19	383	25.23	556	29.92	
4155	Mthfd1l	1.19	47	2.81	72	3.33	
4156	Scyl2	1.19	237	15.39	373	18.25	
4157	Zfp276	1.19	44	4.14	77	4.91	
4158	Pnlsr	1.19	345	20.03	509	23.74	
4159	Papln	1.19	54	3.24	75	3.84	
4160	Rras	1.19	41	15.63	67	18.52	
4161	Tarbp2	1.19	54	10.11	82	11.98	
4162	Pacsln2	1.19	146	9.69	220	11.49	
4163	Rn60_15_0408.6	1.18	10	3.8	10	4.5	
4164	Rbpj_2	1.18	472	43.42	767	51.44	
4165	Bms1	1.18	144	11.15	230	13.21	
4166	Dcps	1.18	92	19.47	154	23.06	
4167	LOC688906	1.18	295	12.93	464	15.32	
4168	Ccz1b	1.18	133	17.98	199	21.3	
4169	Tnfaip1	1.18	431	37.91	668	44.9	
4170	Dnajc21	1.18	27	4.63	43	5.49	
4171	Setmar	1.18	17	1.81	25	2.14	
4172	Aagab	1.18	53	11.97	79	14.17	
4173	Dnajc1	1.18	68	4.65	94	5.51	
4174	Fbxo25	1.18	26	4.06	48	4.8	
4175	Haus3	1.18	15	2.12	29	2.5	
4176	Pcp4l1	1.18	20	2.83	57	3.35	
4177	Rexo2	1.18	90	21.83	166	25.84	
4178	Setd7	1.18	84	8.79	133	10.41	
4179	Slc19a2	1.18	35	2.2	54	2.6	
4180	Thoc1_1	1.18	66	17.38	108	20.57	
4181	Zfp142	1.18	190	7.72	302	9.14	
4182	Zrsr2	1.18	59	2.97	100	3.52	
4183	Ppp2r3c	1.18	59	7.53	93	8.91	
4184	RGD1306001	1.18	16	4.77	25	5.65	
4185	Tubb2b	1.18	288	110.03	461	130.23	
4186	Hnrnpf	1.18	507	89.21	788	105.58	
4187	Erlin2	1.18	182	16.46	291	19.48	
4188	Sipa1l2	1.18	222	9.47	367	11.2	
4189	Marf1	1.18	0	10.69	0	12.65	
4190	Tnks1bp1	1.18	183	10.37	299	12.26	
4191	Clu	1.18	1294	249.42	2068	294.92	
4192	Pdgfc	1.18	210	22.93	326	27.11	
4193	Rab3ip	1.18	65	8.27	106	9.78	
4194	Raly	1.18	523	107.13	841	126.66	
4195	Plaa	1.18	125	15.72	207	18.59	
4196	Tgfb1	1.18	76	12.52	126	14.8	
4197	Otud5	1.18	285	29.88	446	35.32	
4198	AABR07067737.1	1.18	50	1.01	76	1.2	
4199	Caprin2	1.18	49	3.63	65	4.29	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4200	Wdr44	1.18	43	2.43	92	2.87	
4201	Psmc4	1.18	226	49.77	364	58.8	
4202	Dis3l2	1.18	242	9.65	356	11.4	
4203	Vprbp	1.18	203	10.34	313	12.22	
4204	Pex2	1.18	66	11.15	109	13.18	
4205	Pms2	1.18	79	6.19	116	7.31	
4206	Eif3e	1.18	111	42.48	121	50.17	
4207	Nbas	1.18	350	11.81	566	13.95	
4208	Phrf1	1.18	298	16.98	455	20.05	
4209	Phka1	1.18	594	29.97	956	35.39	
4210	Prnp	1.18	565	93.98	903	110.96	
4211	AC097890.1	1.18	8	3.55	12	4.19	
4212	Arl2	1.18	793	7.51	988	8.87	
4213	Kctd21	1.18	19	2.37	32	2.8	
4214	Ube2q1	1.18	186	28.07	281	33.12	
4215	Kdm3b	1.18	421	20.29	664	23.94	
4216	Ide	1.18	358	21.55	556	25.43	
4217	Mtf2	1.18	119	9.09	177	10.73	
4218	Cnot8	1.18	175	25.34	282	29.9	
4219	Ccdc186	1.18	62	5.9	106	6.96	
4220	Itpkc	1.18	62	4.95	87	5.84	
4221	RGD1307929	1.18	506	24.72	783	29.15	
4222	AABR07065438.1	1.18	21	57.88	21	68.25	
4223	Ctdp1	1.18	224	13.68	293	16.12	
4224	Snrpd2	1.18	39	20.27	49	23.89	
4225	Zfp449	1.18	30	2.41	46	2.84	
4226	Cyth3	1.18	63	4.81	96	5.67	
4227	Ptar1	1.18	56	5.9	92	6.95	
4228	Plec	1.18	951	19.66	1500	23.18	
4229	Gbbp111	1.18	94	19.94	149	23.5	
4230	Acsf2	1.18	38	3.88	60	4.57	
4231	Fam219a	1.18	52	4.77	89	5.61	
4232	Oxsr1	1.18	237	14.88	367	17.53	
4233	Fam20c	1.18	140	13.79	219	16.24	
4234	Mt-nd4l	1.18	243	714.38	434	841.24	
4235	Ddx27	1.18	102	10.79	157	12.7	
4236	Pkia	1.18	60	7.35	85	8.65	
4237	Sbno1	1.18	243	13.56	372	15.96	
4238	Fbxw8	1.18	211	11.95	316	14.06	
4239	Tbc1d9b	1.18	304	17.19	474	20.24	
4240	Atf4	1.18	322	82.69	511	97.33	
4241	Wnt5a	1.18	51	3.41	81	4.01	
4242	Klf16	1.18	49	6.57	78	7.73	
4243	Cul3	1.18	220	17.12	353	20.15	
4244	Mat2b	1.18	158	23.03	231	27.1	
4245	Slc38a2	1.18	1107	82.8	1738	97.41	
4246	Nol9	1.18	79	11.48	127	13.5	
4247	Bmpr1a	1.18	217	23.46	318	27.59	
4248	Tbc1d5	1.18	364	13.83	618	16.27	
4249	Igf2r	1.18	631	15.91	1204	18.7	
4250	Atxn2l	1.18	411	33.54	650	39.42	
4251	Ddx17	1.18	1562	86.2	2369	101.29	
4252	Apobr	1.17	7	0.59	10	0.69	
4253	Cyp2s1	1.17	19	1.93	31	2.26	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4254	Ili4i1	1.17	15	1.29	20	1.52	
4255	RGD1561590	1.17	51	50.09	87	58.85	
4256	Rnf6	1.17	99	16.44	149	19.32	
4257	Rtp4	1.17	8	1.31	14	1.54	
4258	Suv39h2	1.17	12	0.58	16	0.68	
4259	AABR07013202.1	1.17	5	2.99	8	3.51	
4260	AABR07044711.1	1.17	1	1.73	2	2.04	
4261	Abca8	1.17	24	1.04	27	1.22	
4262	Arap1	1.17	209	12.49	333	14.68	
4263	AY172581.18	1.17	6	35.2	10	41.36	
4264	Dctpp1	1.17	7	3.93	11	4.62	
4265	Dnajc27	1.17	25	1.56	35	1.84	
4266	Gipc2	1.17	13	2.03	16	2.38	
4267	Gli4	1.17	48	4.45	68	5.23	
4268	Herc6	1.17	15	0.71	21	0.83	
4269	Htatip2	1.17	12	1.83	22	2.15	
4270	Igsf1	1.17	9	0.58	16	0.68	
4271	Irf4	1.17	16	1.05	27	1.24	
4272	LOC679582	1.17	19	1.16	21	1.36	
4273	Mettl13	1.17	46	3.52	68	4.14	
4274	Mis18bp1	1.17	31	1.37	42	1.61	
4275	Nhlrc1	1.17	7	2.13	11	2.5	
4276	P2rx7	1.17	8	0.66	11	0.78	
4277	Pdss2	1.17	107	4.89	154	5.75	
4278	Pgpep1	1.17	65	12.12	97	14.24	
4279	Poc1a	1.17	12	2.3	24	2.7	
4280	Rn60_10_0702.4	1.17	19	2.6	27	3.05	
4281	Slc6a4	1.17	14	0.77	15	0.91	
4282	Slc9a3r2	1.17	7	1.18	12	1.39	
4283	Thap2	1.17	16	3.88	27	4.55	
4284	Vma21	1.17	26	4.95	49	5.81	
4285	Gdi2	1.17	467	72.78	716	85.49	
4286	Top2b	1.17	393	20.52	616	24.09	
4287	Ablim1	1.17	1246	51.52	2104	60.5	
4288	Morc2	1.17	186	11.79	280	13.84	
4289	Erp44	1.17	173	34.43	277	40.42	
4290	Ints8	1.17	208	15.99	341	18.78	
4291	Ppip5k2	1.17	164	7.21	253	8.46	
4292	Brd3	1.17	241	22.72	365	26.66	
4293	Ubr7	1.17	122	10.63	190	12.46	
4294	Mme	1.17	369	38.39	594	45.02	
4295	Ggps1	1.17	107	5.72	183	6.7	
4296	Tmem199	1.17	45	11.85	71	13.9	
4297	Josd1	1.17	136	17.67	233	20.71	
4298	AABR07015081.2	1.17	472	1026.95	565	1203.9	
4299	Cdc23	1.17	215	19.58	300	22.95	
4300	Fam45a	1.17	56	10.37	100	12.15	
4301	Ipo8	1.17	108	12.12	167	14.2	
4302	Sod1	1.17	495	263.82	816	309.07	
4303	Fancm	1.17	88	3.31	134	3.88	
4304	Tfeb	1.17	31	4.61	53	5.4	
4305	Adk	1.17	202	21.66	309	25.37	
4306	Rasl11b	1.17	64	11.84	104	13.87	
4307	Dnajc13	1.17	365	14.27	583	16.71	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4308	Snx8	1.17	77	7.33	135	8.59	
4309	Nop2	1.17	58	11.87	65	13.89	
4310	Ccdc43	1.17	50	7.3	76	8.54	
4311	Ccdc9	1.17	137	14.19	198	16.6	
4312	Oxsm	1.17	28	2.68	39	3.14	
4313	Polr2m_1	1.17	190	21.01	313	24.59	
4314	Rab2a	1.17	125	49.56	221	57.97	
4315	Zfp317	1.17	42	6.59	71	7.71	
4316	Maz	1.17	121	27.83	185	32.54	
4317	Qk	1.17	434	24	673	28.06	
4318	Zfand6	1.17	178	20.4	288	23.84	
4319	Tab2	1.17	309	21.93	490	25.63	
4320	Nr1d2	1.17	211	14.92	351	17.44	
4321	Ddx59	1.17	43	5.39	67	6.3	
4322	Esrra	1.17	40	5.37	77	6.28	
4323	Fam114a2	1.17	96	15.45	134	18.05	
4324	Ptgr2	1.17	119	9.64	191	11.26	
4325	Tnip2	1.17	37	3.63	55	4.24	
4326	Dlg3	1.17	67	2.87	101	3.35	
4327	LOC257650	1.17	79	3.03	116	3.54	
4328	Rpl9	1.17	13	354.64	8	414.26	
4329	Cct6a	1.17	303	52.95	500	61.84	
4330	Setd2	1.17	455	16.11	700	18.8	
4331	Ccnh	1.17	103	10.6	182	12.37	
4332	Vcpip1	1.17	171	12.84	252	14.98	
4333	Ppp6r2	1.17	152	12.69	204	14.81	
4334	Ubqln4	1.17	296	28.84	470	33.65	
4335	Stau1	1.17	237	22.5	387	26.25	
4336	RGD1561252	1.17	4	9.9	5	11.55	
4337	Agpat9	1.17	30	2.97	48	3.46	
4338	Exosc7	1.17	45	8.69	64	10.13	
4339	Gkap1	1.17	141	10.02	222	11.69	
4340	LOC100911625	1.17	0	3.84	0	4.48	
4341	Polr3k	1.17	27	9.38	43	10.94	
4342	Supt16h	1.17	258	21.42	404	24.98	
4343	Ginm1	1.17	160	41.49	264	48.37	
4344	Uri1	1.17	186	14.21	288	16.56	
4345	Nphp3	1.17	52	2.79	68	3.25	
4346	Papss2	1.17	58	3.41	78	3.97	
4347	Nsun2	1.17	156	10.79	238	12.57	
4348	Lman2l	1.17	160	12.69	223	14.79	
4349	Mdk	1.17	81	38.67	119	45.05	
4350	RGD1309995	1.17	159	11.41	236	13.29	
4351	Numb	1.16	143	17.5	254	20.38	
4352	Copb2	1.16	263	39.79	405	46.34	
4353	Usp6nl	1.16	307	16.72	495	19.47	
4354	Wdr26	1.16	528	28.78	834	33.53	
4355	LOC102551071	1.16	749	167.16	1201	194.66	
4356	Slc25a46	1.16	95	8.35	159	9.72	
4357	Crebbp	1.16	432	13.19	690	15.35	
4358	Tbc1d8b	1.16	88	5.02	135	5.84	
4359	Fkbp11	1.16	522	39.57	825	46.05	
4360	Ankfy1	1.16	493	20.92	753	24.35	
4361	Rif1	1.16	152	6.19	225	7.21	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4362	Psma4	1.16	153	45.18	239	52.57	
4363	Ltn1	1.16	193	8.44	286	9.82	
4364	Tax1bp3	1.16	255	76.95	412	89.51	
4365	AC099294.1	1.16	0	1.45	0	1.68	
4366	Ccdc84	1.16	29	3.26	44	3.79	
4367	Etfp	1.16	151	28.99	261	33.71	
4368	Fam169a	1.16	22	3.27	39	3.8	
4369	Micu3	1.16	30	1.75	46	2.03	
4370	Ociad2	1.16	10	8.23	17	9.57	
4371	Wdpcp	1.16	55	2.5	98	2.9	
4372	AABR07035818.1	1.16	51	28.14	76	32.73	
4373	Aldh1a7	1.16	9	2.17	11	2.53	
4374	Camta1_1	1.16	70	6.08	116	7.07	
4375	Gabarapl1	1.16	219	44.45	338	51.7	
4376	Glul	1.16	329	47.21	512	54.9	
4377	Lbhd1	1.16	17	10.12	28	11.77	
4378	Pex7	1.16	26	4.2	45	4.88	
4379	Shank2_2	1.16	9	0.34	11	0.39	
4380	Syn3	1.16	131	1.44	135	1.67	
4381	Tob2	1.16	47	5.65	69	6.57	
4382	Tuba1c_1	1.16	0	2.42	0	2.81	
4383	Ube2l6	1.16	10	2.31	16	2.69	
4384	Zbtb8a	1.16	16	1.52	28	1.77	
4385	Eif3a	1.16	679	46.06	1052	53.56	
4386	Cab39	1.16	303	24.18	473	28.12	
4387	Vps11	1.16	280	26.01	431	30.24	
4388	Pkd2	1.16	303	18.44	483	21.43	
4389	Asah1	1.16	366	44.82	588	52.08	
4390	Slx4	1.16	180	8.39	268	9.75	
4391	Rprd1b	1.16	91	6.59	124	7.65	
4392	Rps28_1	1.16	33	69.42	49	80.65	
4393	Cyb561a3	1.16	56	7.55	92	8.77	
4394	Xpo6	1.16	256	15.95	400	18.52	
4395	Mff_2	1.16	167	82.69	227	96.01	
4396	Zcchc14	1.16	156	13.79	256	16.01	
4397	Zfp609	1.16	334	11.31	546	13.13	
4398	Stx6	1.16	158	19.4	252	22.52	
4399	Rps6ka3	1.16	515	21.98	843	25.51	
4400	Atg3	1.16	59	9.88	101	11.47	
4401	Lcmt1	1.16	71	10.18	111	11.81	
4402	Cttn_2	1.16	0	18.99	0	22.04	
4403	Zfyve26	1.16	192	6.21	303	7.21	
4404	Evi5l	1.16	50	5.28	71	6.12	
4405	Fbxl3-ps1	1.16	31	2.42	47	2.81	
4406	Rsf1	1.16	168	9.03	263	10.47	
4407	Mt-nd2	1.16	3182	1121.4	4962	1300.6	
4408	Sh3bp5	1.16	81	6.95	124	8.06	
4409	Acox3	1.16	107	9.63	163	11.17	
4410	Tsr2	1.16	51	5.76	69	6.68	
4411	Clpx	1.16	116	13.48	170	15.63	
4412	Bche	1.16	134	7.27	215	8.43	
4413	Ccnt2	1.16	274	10.82	402	12.55	
4414	H6pd	1.16	42	3.07	69	3.55	
4415	Ppme1	1.16	130	14.86	180	17.22	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4416	Pdcd11	1.16	283	13.39	439	15.51	
4417	Pds5b	1.16	278	9.88	445	11.44	
4418	Arfgef2	1.16	223	8.06	350	9.34	
4419	Nop58	1.16	147	18.44	220	21.35	
4420	Grsf1	1.16	209	22.42	306	25.97	
4421	Atxn7l3b	1.16	349	36.05	538	41.74	
4422	Higd1a	1.16	39	7.36	59	8.53	
4423	Rab4a	1.16	37	7.96	59	9.22	
4424	Gm12258	1.16	63	5.45	97	6.31	
4425	Phf21a	1.16	319	20.56	482	23.81	
4426	Akirin1	1.16	91	11.17	152	12.93	
4427	Ccar1	1.16	233	13.71	388	15.86	
4428	Kif3c	1.16	62	4.45	93	5.15	
4429	Rnf144a	1.16	52	2.94	84	3.4	
4430	Kihl20	1.16	67	3.94	102	4.56	
4431	Slc24a5	1.16	66	11.74	119	13.58	
4432	Ttbk2	1.16	80	4.32	108	5	
4433	Faim_2	1.16	23	19.64	35	22.71	
4434	Insig1	1.16	339	67.03	553	77.52	
4435	Tfg	1.16	216	36.29	351	41.96	
4436	lds	1.16	198	41.91	314	48.45	
4437	Setd5	1.16	730	29.07	1185	33.6	
4438	Kif3b	1.16	113	5.69	172	6.58	
4439	Ep400	1.16	555	16.81	856	19.43	
4440	Pak2_1	1.16	205	26.12	345	30.19	
4441	Zfp106	1.16	338	18.24	516	21.09	
4442	Phldb3	1.16	32	4.16	51	4.8	
4443	Arhgap31	1.16	404	19.73	704	22.8	
4444	Arl6	1.16	34	4.3	53	4.97	
4445	Ccdc34	1.16	16	1.57	22	1.82	
4446	Ccna2	1.16	9	1.69	16	1.95	
4447	Fance	1.16	44	4.29	54	4.96	
4448	Mbnl3	1.16	28	1.98	51	2.28	
4449	N6amt2	1.16	27	1.9	32	2.2	
4450	RGD1308147	1.16	33	6.05	51	6.99	
4451	Rin3	1.16	19	1.03	28	1.18	
4452	Rsbm1l	1.16	110	8.22	180	9.5	
4453	Slc26a8	1.16	48	1.27	34	1.47	
4454	Zak	1.16	67	10.01	100	11.56	
4455	lfrd2	1.16	23	4.07	35	4.71	
4456	Mettl20	1.16	31	4.96	49	5.73	
4457	Pgrmc2	1.15	153	28.74	242	33.19	
4458	Anp32a	1.15	365	93.3	545	107.76	
4459	Dusp3	1.15	114	8.99	173	10.38	
4460	Pank4	1.15	108	10.54	156	12.17	
4461	Sh2d4a	1.15	406	44.58	622	51.46	
4462	Samd9l	1.15	68	3.59	118	4.14	
4463	AC106292.2	1.15	81	25.57	125	29.5	
4464	Csrnp2	1.15	78	6.45	92	7.45	
4465	Scoc	1.15	89	17.33	143	20	
4466	Pum2	1.15	715	34.71	1064	40.03	
4467	Ccdc71	1.15	71	15.46	110	17.84	
4468	Kdm1b	1.15	53	3.02	70	3.48	
4469	Mkks	1.15	44	4.27	69	4.92	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4470	Zfp709	1.15	46	4.61	70	5.32	
4471	Dock7	1.15	443	18.55	677	21.4	
4472	Tnrc6a	1.15	506	17.78	797	20.51	
4473	RGD1561931	1.15	131	5.24	210	6.04	
4474	Poc1b	1.15	135	5.93	173	6.83	
4475	Cyca_1	1.15	50	28.97	86	33.39	
4476	Dgcr14	1.15	13	5.03	14	5.8	
4477	Ikkg	1.15	27	5.99	48	6.9	
4478	Jmjd8	1.15	51	11.51	80	13.27	
4479	Rrp7a	1.15	8	3.82	13	4.41	
4480	Kank1	1.15	649	35.96	986	41.45	
4481	Tial1	1.15	120	18.6	214	21.43	
4482	Prkx	1.15	78	6.61	124	7.62	
4483	Impa1	1.15	97	13.1	151	15.09	
4484	Alg10	1.15	112	17.23	178	19.84	
4485	Selk	1.15	62	31.55	105	36.32	
4486	Ap2b1	1.15	519	42.13	820	48.5	
4487	Ndufa8	1.15	84	27.11	136	31.2	
4488	Ssfa2	1.15	196	11.27	311	12.96	
4489	Ccdc102a	1.15	79	8.19	130	9.42	
4490	Dusp12	1.15	20	3.68	34	4.23	
4491	Ttc21b	1.15	120	7.15	194	8.23	
4492	Afap1	1.15	134	6.4	209	7.36	
4493	Coa4	1.15	13	3.45	20	3.97	
4494	E2f8	1.15	14	1.79	23	2.06	
4495	Gtf3a	1.15	63	10.61	82	12.2	
4496	LOC100125364	1.15	69	9.27	101	10.67	
4497	Mex3b	1.15	78	8.33	122	9.58	
4498	Rn60_6_0863.2	1.15	2	4.38	3	5.04	
4499	Rn60_6_1241.2	1.15	41	2	69	2.3	
4500	Tti2	1.15	34	4.9	43	5.64	
4501	Ufm1	1.15	40	6.62	68	7.61	
4502	Tep1	1.15	364	14.96	579	17.21	
4503	Rbm3	1.15	317	60.15	473	69.16	
4504	Arhgap35	1.15	483	18.27	733	21	
4505	Snx1	1.15	77	23.57	127	27.1	
4506	Rpl17	1.15	89	65.08	120	74.83	
4507	Itpr1	1.15	745	20.02	1239	23.01	
4508	Nucks1	1.15	117	25.35	166	29.14	
4509	Dkc1	1.15	262	37.23	365	42.78	
4510	Tp53inp2	1.15	392	33.65	594	38.64	
4511	Abhd17c	1.15	111	13.97	173	16.04	
4512	Pdpf	1.15	56	30.72	88	35.27	
4513	Tfpi	1.15	111	7.86	159	9.02	
4514	Whsc1	1.15	292	14.23	486	16.34	
4515	Ttc37	1.15	115	7.38	170	8.47	
4516	Ranbp2	1.15	462	17.44	719	20.02	
4517	Scaf8	1.15	266	18.03	426	20.7	
4518	Pex13	1.15	81	10.06	123	11.54	
4519	Slc7a1	1.15	85	3.9	130	4.48	
4520	Hdgfrp3	1.15	87	6.62	162	7.59	
4521	Mttr2	1.15	166	22.66	260	26.01	
4522	Uhmk1	1.15	73	12.73	128	14.61	
4523	Prdm4	1.15	117	11.58	184	13.29	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4524	Zbtb10	1.15	60	3.3	92	3.78	
4525	Eif4e2	1.15	104	15.58	166	17.87	
4526	Gtf3c3	1.15	127	4.96	187	5.7	
4527	Lamb1	1.15	390	23.99	599	27.52	
4528	Kdelc2	1.15	543	50.05	837	57.43	
4529	Tmem43	1.15	441	55	673	63.1	
4530	Vwa9	1.15	117	14.05	167	16.11	
4531	Egln2	1.15	168	18.77	254	21.52	
4532	Chmp4bl1	1.15	43	20.97	77	24.04	
4533	Ctsh	1.15	33	6.19	49	7.1	
4534	Elmo3	1.15	25	2.26	32	2.59	
4535	Kif11	1.15	53	3.44	78	3.95	
4536	Oard1	1.15	24	3.92	34	4.49	
4537	Ankrd49	1.15	33	5.08	52	5.82	
4538	Appl2	1.15	195	16.49	288	18.9	
4539	Slc31a2	1.15	41	6.15	55	7.05	
4540	RGD1560341	1.15	106	30.57	158	35.03	
4541	Fkbp1a	1.15	336	74.01	517	84.81	
4542	Pnpla2	1.15	0	14.77	0	16.93	
4543	Rnmt	1.15	126	8.44	193	9.66	
4544	Tia1	1.15	201	15.32	286	17.55	
4545	Prim1	1.15	107	17.47	162	20.01	
4546	Wac	1.15	289	43.22	439	49.52	
4547	Arfgef1	1.15	378	17.73	612	20.31	
4548	Rfx7	1.15	284	9.87	404	11.3	
4549	Ncam1	1.15	58	3.85	99	4.41	
4550	RGD1564541	1.15	52	4.71	81	5.4	
4551	Ubp1	1.15	173	19.37	262	22.18	
4552	Cenpe	1.15	208	7.51	299	8.6	
4553	Rab28	1.15	126	16.97	192	19.43	
4554	Ash2l	1.14	187	21.37	272	24.47	
4555	Chka	1.14	105	4.48	164	5.13	
4556	Ppm1f	1.14	152	9.9	221	11.33	
4557	Slc30a6	1.14	66	5.99	78	6.86	
4558	LOC100910990	1.14	0	6.63	0	7.59	
4559	Nudcd1	1.14	71	6.2	114	7.09	
4560	Vimp	1.14	132	35.58	213	40.72	
4561	Zfp295	1.14	105	5.68	152	6.5	
4562	Arhgap5	1.14	280	17.67	416	20.22	
4563	Prkab2	1.14	65	3.56	97	4.08	
4564	Nup54	1.14	72	7.51	96	8.59	
4565	Smg7	1.14	234	13.48	351	15.43	
4566	Snx11	1.14	79	8.31	117	9.51	
4567	Rps6ka4	1.14	111	11.62	170	13.29	
4568	Mgat1	1.14	271	35.19	429	40.24	
4569	Gnal	1.14	135	3.59	130	4.1	
4570	Zfp212	1.14	39	8.32	63	9.52	
4571	Aga	1.14	116	26.04	172	29.77	
4572	Cdc7	1.14	19	2.11	33	2.41	
4573	Prpf3	1.14	124	12.82	191	14.66	
4574	Tcf7	1.14	33	3.97	47	4.54	
4575	Usp4	1.14	254	19.54	402	22.34	
4576	Vps39	1.14	251	13.84	454	15.83	
4577	Gnai3	1.14	320	32.84	463	37.55	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4578	Hn1	1.14	301	58.86	440	67.28	
4579	RGD1559904	1.14	242	13.13	367	15	
4580	Zfp280d	1.14	160	7.18	252	8.2	
4581	Wasf2	1.14	122	12.06	196	13.78	
4582	Pdpk1	1.14	99	10.21	158	11.67	
4583	Smg8	1.14	60	5.13	88	5.86	
4584	Tle1	1.14	133	11.81	232	13.49	
4585	Spg11	1.14	206	6.31	303	7.21	
4586	Ddx54	1.14	130	13.92	197	15.9	
4587	Stambp	1.14	51	6.75	77	7.71	
4588	Paip1	1.14	194	21.9	299	25.01	
4589	Ddx3x	1.14	824	63.99	1252	73.08	
4590	Zfp799	1.14	56	9.16	86	10.46	
4591	Ddi2	1.14	310	10.45	474	11.94	
4592	Cnbp	1.14	418	89.08	666	101.72	
4593	Hsbp1	1.14	260	70.2	401	80.14	
4594	Ddx6	1.14	441	47.37	687	54.08	
4595	Fndc3a	1.14	213	11.54	397	13.18	
4596	Sdf2	1.14	184	32.13	275	36.68	
4597	Lamb2	1.14	1675	101.1	2577	115.39	
4598	Flcn	1.14	188	17.82	292	20.34	
4599	Eif3j	1.14	206	33.79	314	38.56	
4600	Ccbe1	1.14	346	106.73	550	121.81	
4601	Hdlbp	1.14	2253	106.77	3420	121.85	
4602	Ccdc6	1.14	86	9.74	121	11.11	
4603	E2f5	1.14	38	6.78	64	7.74	
4604	Jak2	1.14	105	7.18	181	8.2	
4605	Mcat	1.14	32	3.62	51	4.13	
4606	Rora	1.14	66	4.07	90	4.65	
4607	Prkar2a	1.14	185	20.24	284	23.09	
4608	Npc1	1.14	244	17.61	350	20.09	
4609	Tubgcp5	1.14	155	9.49	248	10.82	
4610	Vrk3	1.14	112	16.36	176	18.66	
4611	Arrdc1	1.14	74	13.54	115	15.44	
4612	Coq10b	1.14	75	13.18	121	15.03	
4613	Pptc7	1.14	189	8.49	270	9.69	
4614	Tox2	1.14	197	17.73	281	20.21	
4615	Ept1	1.14	57	5.56	92	6.34	
4616	LOC102547932	1.14	39	7.74	61	8.83	
4617	Pdcd7	1.14	62	6.42	83	7.32	
4618	Pfdn2	1.14	97	8.69	129	9.91	
4619	Mllt6	1.14	160	11.5	243	13.11	
4620	Map4k3	1.14	206	8.4	323	9.57	
4621	Rps7	1.14	104	345.98	150	394.24	
4622	Acad8	1.14	61	6.15	79	7.01	
4623	B4galt6	1.14	59	2.46	83	2.8	
4624	Capn2	1.14	381	34.64	591	39.46	
4625	Fam135a	1.14	154	5.59	221	6.37	
4626	March5	1.14	119	22.35	192	25.46	
4627	Sema3e	1.14	127	4.35	225	4.96	
4628	Snrnp35	1.14	37	6.87	50	7.82	
4629	Vamp8	1.14	23	25.34	47	28.87	
4630	Zfp259	1.14	75	7.88	124	8.97	
4631	Ccdc82	1.14	36	2.08	53	2.37	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4632	Nfia	1.14	722	34.38	1165	39.16	
4633	Rpl23	1.14	326	205.52	497	234.09	
4634	Gpd2	1.14	116	6.57	160	7.49	
4635	Recql	1.14	92	6.49	148	7.38	
4636	Uqcrc2	1.14	293	56.97	466	64.85	
4637	Rfc1	1.14	175	11.88	271	13.53	
4638	Actr1a	1.14	436	52.6	672	59.87	
4639	Cyfip2	1.14	307	14.74	466	16.77	
4640	Ints10	1.14	120	9.11	176	10.37	
4641	Htatsf1	1.14	125	12.93	195	14.72	
4642	Rps25	1.14	152	331.17	151	376.8	
4643	Serinc5	1.14	948	58.99	1485	67.12	
4644	Akip1	1.14	45	4.67	72	5.31	
4645	Epb4.1l5	1.14	81	6.94	129	7.9	
4646	Terf2ip	1.14	51	7.55	74	8.59	
4647	Ddx50	1.14	153	13.21	214	15.03	
4648	Lpcat4	1.14	27	5.32	38	6.05	
4649	Dync1i2	1.14	349	38.63	578	43.95	
4650	Cdk19	1.14	236	10.22	340	11.62	
4651	Fbxo9	1.14	102	12.13	141	13.8	
4652	Rxra	1.14	95	12.95	147	14.73	
4653	Poll	1.14	50	7.57	80	8.61	
4654	Stip1	1.14	370	57.9	551	65.84	
4655	Cep85	1.14	95	5.8	158	6.59	
4656	Dcun1d1	1.14	106	3.41	142	3.87	
4657	Cdk13	1.14	230	12.13	354	13.79	
4658	S100pbp	1.14	244	12.5	344	14.2	
4659	Slc1a4	1.14	168	14.6	267	16.58	
4660	Dlat	1.14	73	11	118	12.49	
4661	Nup153	1.14	270	13.83	413	15.7	
4662	Slc20a1	1.14	151	12.41	220	14.09	
4663	Galnt11	1.14	165	18.06	290	20.5	
4664	Asb3	1.14	50	4.99	88	5.67	
4665	Rn60_13_0839.5	1.14	54	4.61	91	5.23	
4666	Prdm15	1.14	65	2.97	119	3.37	
4667	Mapk1ip1l	1.14	261	20.5	382	23.27	
4668	Ube2e3	1.13	216	41.87	339	47.52	
4669	Prdm2	1.13	334	14.56	499	16.53	
4670	Ncor1	1.13	743	27.11	1117	30.76	
4671	Dhx40	1.13	165	13.88	256	15.74	
4672	Parva	1.13	449	31.72	731	35.99	
4673	B4galt4	1.13	44	4.91	59	5.57	
4674	Orc3	1.13	157	13.13	237	14.89	
4675	Trim36	1.13	44	3.73	60	4.23	
4676	Wdr62_1	1.13	2	2.19	2	2.49	
4677	LOC100364791	1.13	160	15.55	249	17.62	
4678	Zfand2a	1.13	71	6.83	98	7.74	
4679	Ralbp1	1.13	241	26.72	365	30.27	
4680	Ppp6r3	1.13	411	22.61	611	25.6	
4681	Becn1	1.13	177	13.64	286	15.44	
4682	Plcl1	1.13	39	2.68	64	3.03	
4683	Ptprm	1.13	418	14.47	741	16.38	
4684	Ctsf	1.13	73	13.99	111	15.84	
4685	Mical1	1.13	79	7.37	130	8.34	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4686	Slain2	1.13	274	13.68	387	15.48	
4687	lqsec1	1.13	192	11.43	331	12.93	
4688	Rn60_14_0846.1	1.13	112	20.93	149	23.68	
4689	Cox20	1.13	102	13.03	174	14.75	
4690	Suv39h111	1.13	46	4.01	69	4.54	
4691	Ctcf	1.13	291	20.9	455	23.65	
4692	Cacna2d3	1.13	1614	12.71	2118	14.38	
4693	Cd59	1.13	203	47.09	305	53.26	
4694	Ndrp2	1.13	160	27.56	250	31.16	
4695	Mtpn	1.13	125	32.84	197	37.14	
4696	Chn2	1.13	209	11.63	339	13.15	
4697	Hs3st1	1.13	102	11.21	193	12.68	
4698	Srp68	1.13	223	21.05	320	23.8	
4699	Numbl	1.13	77	4.91	100	5.55	
4700	Rfc5	1.13	53	7.1	80	8.02	
4701	Irs1	1.13	532	28.27	815	31.95	
4702	Zfp638	1.13	268	12.17	424	13.76	
4703	Tapbp1	1.13	95	16.51	147	18.66	
4704	Ltv1	1.13	53	8.63	78	9.74	
4705	Mre11a	1.13	117	6.04	169	6.82	
4706	Rmnd1	1.13	102	8.17	138	9.23	
4707	Me3	1.13	146	16.04	323	18.12	
4708	Cecr5	1.13	77	9.39	105	10.6	
4709	Nae1	1.13	73	9.97	102	11.26	
4710	S100a10	1.13	355	218	546	246.13	
4711	Ube2d3	1.13	288	57	440	64.35	
4712	Eif2ak1	1.13	195	24.51	278	27.67	
4713	Pdcd6	1.13	141	24.6	225	27.76	
4714	Ryk	1.13	293	50.01	460	56.44	
4715	Strn3	1.13	289	13.87	451	15.65	
4716	Tmem126a	1.13	169	16.33	334	18.42	
4717	Creb3l1	1.13	61	7.82	95	8.82	
4718	Cltc	1.13	1239	71.65	1876	80.82	
4719	Zfp384	1.13	227	17.63	338	19.88	
4720	Fbxl19	1.13	67	7.14	109	8.05	
4721	Helb	1.13	49	4.67	94	5.27	
4722	Zfp219	1.13	174	23.37	256	26.35	
4723	Zbtb5	1.13	141	10.49	213	11.83	
4724	Rexo4	1.13	86	10.33	129	11.64	
4725	Spag7	1.13	84	19.82	116	22.34	
4726	Ace	1.13	71	3.94	110	4.44	
4727	Pfdn5	1.13	91	38.85	134	43.78	
4728	Wdr75	1.13	91	9.52	137	10.73	
4729	N4bp2	1.13	91	5.19	127	5.85	
4730	Rpl14	1.13	227	156.32	299	176.06	
4731	RGD1311899	1.13	87	20.23	129	22.78	
4732	Mk1	1.13	81	11.78	120	13.26	
4733	Rplp1_1	1.13	1704	2090.66	3332	2353.8	
4734	Odf2	1.13	235	13.35	336	15.03	
4735	Gga3	1.13	109	6.75	161	7.6	
4736	Gtpbp4	1.13	66	10.76	77	12.11	
4737	Yipf4	1.13	105	19.69	167	22.16	
4738	Cdc16	1.13	292	32.36	419	36.41	
4739	Gmps	1.13	133	16.36	189	18.4	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4740	Api5	1.12	337	32.5	507	36.56	
4741	Stk40	1.12	134	11.38	193	12.8	
4742	Dido1	1.12	304	10.51	466	11.82	
4743	Myrf	1.12	146	9.1	211	10.23	
4744	C1s	1.12	567	76.81	815	86.31	
4745	Irak1	1.12	247	26.06	385	29.27	
4746	Sf1	1.12	530	48.29	798	54.23	
4747	Adam10	1.12	306	28.03	477	31.47	
4748	Cnot1	1.12	776	32.86	1167	36.88	
4749	1500009L16Rik	1.12	5	1.42	6	1.59	
4750	AABR07001929.1	1.12	9	0.87	8	0.97	
4751	AABR07006866.1	1.12	4	1.74	5	1.95	
4752	AABR07014974.1	1.12	2	2.28	3	2.55	
4753	AABR07019306.1	1.12	1	0.56	2	0.62	
4754	AABR07042915.1	1.12	0	1.74	0	1.95	
4755	AABR07071701.1	1.12	3	3.18	5	3.56	
4756	Actl7a	1.12	2	0.46	3	0.51	
4757	Adamts20	1.12	2	0.13	7	0.14	
4758	Aig1	1.12	13	0.51	17	0.57	
4759	Ankrd23	1.12	2	0.55	3	0.62	
4760	Atp1a4	1.12	5	0.21	7	0.24	
4761	AY172581.3	1.12	16	85.19	24	95.54	
4762	Baalc	1.12	5	0.24	5	0.27	
4763	Begain	1.12	2	0.26	4	0.29	
4764	Cbr1_1	1.12	0	1.12	0	1.25	
4765	Ccdc116	1.12	5	0.74	6	0.83	
4766	Cdh12	1.12	13	0.1	16	0.12	
4767	Cdh17	1.12	3	0.2	6	0.23	
4768	Chek2	1.12	37	3.18	46	3.57	
4769	Chmp7	1.12	95	13.11	147	14.71	
4770	Chn3	1.12	2	0.6	3	0.68	
4771	Ciao1	1.12	48	9.29	72	10.42	
4772	Cmbl	1.12	9	0.64	11	0.72	
4773	Cox10	1.12	47	3.01	88	3.38	
4774	Dynlrb1	1.12	184	79.24	293	88.86	
4775	Ece2	1.12	7	0.39	11	0.43	
4776	Fam115c_1	1.12	2	1.65	2	1.85	
4777	Gm5611	1.12	1	0.99	1	1.11	
4778	Gm5s	1.12	54	1.98	89	2.22	
4779	Gnas_1	1.12	2	0.88	3	0.99	
4780	Got111	1.12	7	0.51	14	0.57	
4781	Hey2	1.12	14	1.9	21	2.13	
4782	Hfm1	1.12	8	0.17	6	0.19	
4783	Hilpda	1.12	9	14.2	15	15.92	
4784	Hs6st3	1.12	2	1.01	3	1.14	
4785	Irf6	1.12	11	0.9	15	1	
4786	Isg20	1.12	6	0.83	6	0.93	
4787	Krt222	1.12	4	0.23	5	0.25	
4788	LOC100360446	1.12	4	1.43	6	1.6	
4789	LOC100361476	1.12	1	0.51	0	0.57	
4790	LOC100362338	1.12	0	6.52	0	7.32	
4791	LOC100911807	1.12	0	0.44	0	0.49	
4792	LOC365839	1.12	1	0.59	2	0.66	
4793	LOC500034	1.12	42	8.29	71	9.29	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4794	LOC679087	1.12	4	2.72	8	3.05	
4795	LOC684238	1.12	11	0.21	6	0.24	
4796	Magoh	1.12	55	27.02	85	30.3	
4797	Mia	1.12	2	1.27	3	1.42	
4798	Negr1	1.12	28	0.42	28	0.47	
4799	Nfe2l3_2	1.12	8	1.49	12	1.67	
4800	Nfrkb	1.12	224	12.53	348	14.05	
4801	Nkpd1	1.12	2	0.29	4	0.33	
4802	Nlrp9	1.12	3	0.24	5	0.27	
4803	Nmb	1.12	2	0.51	4	0.57	
4804	Nme6	1.12	35	5.78	47	6.48	
4805	Nxpe4_1	1.12	2	0.47	3	0.53	
4806	Opn3	1.12	74	2.07	151	2.32	
4807	Osgpl1	1.12	42	4.43	70	4.96	
4808	P2ry1	1.12	2	0.23	4	0.26	
4809	Pdgfrl	1.12	7	0.49	4	0.55	
4810	Perp	1.12	3	0.39	4	0.43	
4811	Poli	1.12	11	1.43	22	1.6	
4812	Polr2i	1.12	0	5.75	0	6.45	
4813	Prkar1b	1.12	7	0.67	11	0.75	
4814	R3hcc1l	1.12	53	3.36	79	3.77	
4815	Rcan2	1.12	82	6.39	158	7.17	
4816	RGD1306941	1.12	20	1.95	26	2.19	
4817	RGD1359158	1.12	43	5.37	64	6.02	
4818	RGD1564534	1.12	2	0.29	3	0.33	
4819	Rnaseh2b	1.12	45	6.63	57	7.43	
4820	Rtkn	1.12	0	0.28	0	0.32	
4821	Sfn	1.12	1	0.97	1	1.09	
4822	Slc2a6	1.12	1	0.34	2	0.38	
4823	Slc45a3	1.12	2	0.22	6	0.25	
4824	Slc6a16	1.12	10	0.33	10	0.37	
4825	Sncaip	1.12	8	0.35	10	0.39	
4826	SNORD42_1	1.12	0	44.56	0	49.97	
4827	SNORD42_2	1.12	0	10.49	0	11.77	
4828	SNORD48	1.12	0	33.94	0	38.07	
4829	SNORD88_4	1.12	0	24.14	0	27.07	
4830	snoU54	1.12	0	10.65	0	11.94	
4831	Snrpb2	1.12	73	22.5	106	25.23	
4832	Spsb2_2	1.12	0	1.17	0	1.31	
4833	Syn1	1.12	114	0.46	114	0.51	
4834	Tbc1d4	1.12	40	1.84	63	2.07	
4835	Tdrd5	1.12	3	0.21	7	0.23	
4836	Tifa	1.12	14	1.63	16	1.82	
4837	Tk2	1.12	63	7.58	109	8.5	
4838	Tox3	1.12	6	0.23	5	0.26	
4839	Trim32	1.12	0	0.46	0	0.51	
4840	Ttc16	1.12	5	0.54	20	0.6	
4841	Ttll13	1.12	64	0.86	118	0.96	
4842	Vwf	1.12	15	0.41	18	0.46	
4843	Wdr31	1.12	17	2.48	26	2.78	
4844	Zbtb6	1.12	42	6.31	63	7.08	
4845	Zcchc7	1.12	230	7.99	384	8.96	
4846	4930452B06Rik	1.12	15	0.67	40	0.76	
4847	AABR07002774.2	1.12	11	2.94	22	3.3	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4848	AABR07028908.2	1.12	5	0.44	9	0.5	
4849	AABR07035375.1	1.12	0	0.49	0	0.54	
4850	AABR07051400.1	1.12	37	11.25	53	12.61	
4851	AABR07058287.1	1.12	0	0.31	1	0.35	
4852	AABR07059879.1	1.12	0	1.46	0	1.64	
4853	AABR07064257.1	1.12	2	0.13	1	0.15	
4854	AABR07071395.1	1.12	4	0.75	6	0.84	
4855	Abhd5	1.12	53	5.73	76	6.43	
4856	AC091336.1	1.12	0	0.74	1	0.83	
4857	AC129162.1	1.12	27	2.67	21	2.99	
4858	AC130391.3	1.12	6	3.93	10	4.41	
4859	Ada	1.12	14	1.04	45	1.17	
4860	Ap5s1	1.12	12	2.05	21	2.3	
4861	Apeg3	1.12	0	0.78	0	0.87	
4862	Apoo	1.12	22	4.65	39	5.21	
4863	Arsg	1.12	32	0.73	21	0.82	
4864	Atp10b	1.12	108	0.1	174	0.11	
4865	Brsk1	1.12	64	6.5	99	7.29	
4866	Camk1g	1.12	3	0.3	3	0.34	
4867	Cd274	1.12	3	0.37	7	0.42	
4868	Cenpu	1.12	21	0.88	23	0.98	
4869	Chd5	1.12	3	0.1	6	0.11	
4870	Ciart	1.12	6	0.83	6	0.94	
4871	Cldn10	1.12	6	0.52	10	0.59	
4872	Cntn2	1.12	4	0.14	7	0.16	
4873	Copg2	1.12	180	19.95	265	22.38	
4874	Coro6	1.12	2	0.28	3	0.32	
4875	Cox6c	1.12	107	79.2	162	88.82	
4876	Cpeb1	1.12	11	0.45	7	0.5	
4877	Cyp27b1	1.12	2	0.3	4	0.33	
4878	Dars2	1.12	41	4.76	60	5.34	
4879	Dclre1a	1.12	63	3.43	85	3.84	
4880	Dlgap5	1.12	38	3.97	52	4.45	
4881	Dnah17	1.12	8	0.05	8	0.06	
4882	Dnajc2	1.12	57	6.51	84	7.31	
4883	Dyrk3	1.12	3	0.29	4	0.33	
4884	Ect2l	1.12	27	0.28	28	0.32	
4885	Epha5	1.12	14	0.09	15	0.1	
4886	Fam199x	1.12	18	4.99	27	5.6	
4887	Fam83b	1.12	9	0.22	8	0.25	
4888	Fbxl18	1.12	36	1.74	45	1.95	
4889	Fer1l5	1.12	5	0.11	19	0.13	
4890	Gapdhs	1.12	14	0.47	12	0.52	
4891	Gjc1	1.12	31	4.09	52	4.59	
4892	Gnl3	1.12	86	13.42	139	15.05	
4893	Gtpbp10	1.12	21	3.07	36	3.44	
4894	Hhat	1.12	23	1.47	34	1.65	
4895	Ifi47	1.12	6	1.16	9	1.3	
4896	Kdm4d_1	1.12	4	0.62	5	0.7	
4897	Kif21b	1.12	3	0.13	3	0.15	
4898	L2hgdh	1.12	12	1.11	20	1.24	
4899	Lmbrd1	1.12	111	10.8	168	12.11	
4900	LOC685596	1.12	0	3.05	0	3.42	
4901	LOC687780	1.12	0	1.8	0	2.02	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4902	LOC690806	1.12	9	5.42	13	6.08	
4903	Lym5	1.12	2	2.77	3	3.11	
4904	March7	1.12	202	17.86	331	20.03	
4905	Mknk1	1.12	143	13.7	219	15.37	
4906	Mmrn2	1.12	4	0.18	4	0.2	
4907	Mos	1.12	2	0.71	3	0.79	
4908	Mplkip	1.12	43	5.39	59	6.04	
4909	Mrpl41	1.12	21	13.35	30	14.97	
4910	Mrpl47	1.12	19	2.99	29	3.36	
4911	Mrps28	1.12	66	9.22	105	10.34	
4912	Mterfd3	1.12	14	0.45	13	0.5	
4913	Mtfp1	1.12	4	1.06	7	1.19	
4914	Ndnf	1.12	2	0.38	3	0.43	
4915	Nkain1	1.12	9	2.58	16	2.9	
4916	Osbpl1a	1.12	158	10.96	235	12.29	
4917	Pacrgl	1.12	13	1.32	17	1.48	
4918	Pafah1b3	1.12	52	17.93	85	20.11	
4919	Pcdhga2	1.12	9	1.19	13	1.34	
4920	Pde3b	1.12	20	0.16	18	0.19	
4921	Pigl	1.12	52	1.83	56	2.05	
4922	Plekha1	1.12	98	6.7	158	7.52	
4923	Ppfia2	1.12	15	0.21	20	0.24	
4924	Psmc3ip	1.12	14	4.76	23	5.34	
4925	Ptpn7	1.12	3	0.16	3	0.18	
4926	Rapgef1	1.12	6	0.94	9	1.06	
4927	Rbbp8nl	1.12	5	0.14	8	0.16	
4928	Reep1	1.12	17	0.98	26	1.1	
4929	RGD1564664	1.12	2	0.52	3	0.58	
4930	RGD1565844	1.12	2	1.14	3	1.28	
4931	RGD1565862	1.12	95	1.44	78	1.62	
4932	Rn60_2_2049.3	1.12	2	0.89	3	0.99	
4933	Rnf121	1.12	52	5.46	78	6.13	
4934	Serpini1	1.12	15	1.16	22	1.3	
4935	Sft2d3	1.12	16	2.63	24	2.95	
4936	Sh3gl2	1.12	6	0.49	14	0.54	
4937	Slc25a40	1.12	33	1.29	49	1.45	
4938	Slc35d1	1.12	67	5.23	114	5.87	
4939	Slc43a3	1.12	4	0.53	9	0.59	
4940	SNORD12_1	1.12	0	7.87	0	8.83	
4941	Spon1	1.12	32	0.7	35	0.78	
4942	Ssc5d	1.12	11	0.48	17	0.54	
4943	St8sia2	1.12	10	1.92	13	2.16	
4944	Timm10b_2	1.12	1	0.96	1	1.08	
4945	Tmem151b	1.12	8	0.86	13	0.96	
4946	Txlng	1.12	73	3.57	117	4	
4947	Zfp316	1.12	18	1.9	27	2.13	
4948	Zfp334	1.12	16	2.84	24	3.18	
4949	Zfp353	1.12	4	0.91	6	1.02	
4950	RGD1310587	1.12	4	0.53	6	0.6	
4951	Eif2s3	1.12	354	27.56	535	30.87	
4952	Wasl	1.12	278	17.38	418	19.45	
4953	Hbp1	1.12	481	48.04	670	53.77	
4954	Dhx9	1.12	534	44.52	827	49.83	
4955	Zfx	1.12	219	9.15	317	10.24	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
4956	Srpk2	1.12	235	16.48	342	18.44	
4957	Phf12	1.12	208	11.67	292	13.06	
4958	Ube2n	1.12	140	32.38	218	36.23	
4959	Large	1.12	188	10.96	318	12.26	
4960	Grpel1	1.12	119	37.6	179	42.04	
4961	Ar	1.12	155	9.3	267	10.4	
4962	Snx27	1.12	212	11.01	344	12.3	
4963	Arhgef6	1.12	140	11.57	201	12.92	
4964	Rgma	1.12	107	9.47	160	10.59	
4965	Lyst	1.12	113	3.46	177	3.86	
4966	Atr	1.12	123	3.51	171	3.92	
4967	Fbxw2	1.12	166	15.95	266	17.82	
4968	Kpna4	1.12	181	29.45	296	32.9	
4969	Rap1gds1	1.12	305	23.8	474	26.58	
4970	Snrnp40	1.12	114	16.43	162	18.34	
4971	Erap1	1.12	303	21.3	467	23.78	
4972	Fbf1	1.12	104	5.93	150	6.62	
4973	Ralgapb	1.12	390	15.85	579	17.69	
4974	Pten	1.12	187	31.14	312	34.75	
4975	Synj1	1.12	199	7.34	271	8.19	
4976	Mbtd1	1.12	177	9.52	265	10.62	
4977	Rab5b	1.12	358	36.43	541	40.65	
4978	Crot	1.12	94	8.57	137	9.57	
4979	Msi2	1.12	502	23.92	507	26.68	
4980	Ylpm1	1.12	380	12.91	532	14.4	
4981	Smarcad1	1.12	176	9.36	261	10.44	
4982	RGD1564887	1.12	83	6.68	123	7.45	
4983	Snapin	1.12	128	28.02	186	31.24	
4984	Il6st	1.11	277	31.76	428	35.4	
4985	Adrm1	1.11	113	26.63	174	29.68	
4986	Nemf	1.11	76	7.87	102	8.77	
4987	Trappc8	1.11	189	10.6	293	11.81	
4988	AC111257.1	1.11	15	5.22	23	5.81	
4989	Eef1e1	1.11	51	7.32	78	8.15	
4990	Snx2	1.11	123	17.09	189	19.03	
4991	Cox5b	1.11	118	106.97	203	119.13	
4992	B3galnt2	1.11	75	4.11	116	4.58	
4993	Chp1	1.11	154	26.89	224	29.94	
4994	Aqr	1.11	293	19.92	441	22.18	
4995	Dopey2	1.11	124	4.48	188	4.99	
4996	Msantd3	1.11	60	4.58	84	5.1	
4997	Snrk	1.11	133	10.46	195	11.64	
4998	Kdm5c	1.11	387	20.22	578	22.5	
4999	Usp37	1.11	164	6.3	234	7.01	
5000	Gatad1	1.11	53	19.58	79	21.79	
5001	Mysm1	1.11	87	6.12	135	6.8	
5002	Zfp367	1.11	51	4.46	83	4.96	
5003	Plekho2	1.11	57	8.73	83	9.72	
5004	Slc30a4	1.11	133	8.5	200	9.46	
5005	Mt-atp6	1.11	5723	3076.79	8573	3423.2	
5006	Mfn1	1.11	256	17.7	421	19.69	
5007	Hexa	1.11	315	59.74	471	66.46	
5008	Cdc3711	1.11	123	6.78	173	7.55	
5009	Sec62	1.11	218	33.46	330	37.22	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5010	Cul9	1.11	163	5.72	218	6.37	
5011	Edem2	1.11	111	15.76	151	17.53	
5012	LOC100364748	1.11	73	11.69	101	13	
5013	G3bp2	1.11	199	31.4	288	34.92	
5014	Inpp5e	1.11	102	8.67	141	9.64	
5015	Dnmbp	1.11	98	4.77	148	5.3	
5016	LOC100910046	1.11	57	4.82	93	5.36	
5017	Arpc5	1.11	201	40.75	306	45.32	
5018	Ccdc77	1.11	64	5.8	82	6.45	
5019	Ccdc90b	1.11	50	9.99	68	11.11	
5020	Lars2	1.11	73	4.52	120	5.03	
5021	Dld	1.11	171	20.81	267	23.13	
5022	Armcx2	1.11	334	36.59	498	40.67	
5023	Gmpr2	1.11	58	5.33	84	5.92	
5024	Mesdc2	1.11	337	60.53	501	67.27	
5025	Lamp1	1.11	819	146.57	1215	162.88	
5026	Mapk7	1.11	5	4.86	5	5.4	
5027	Rerg	1.11	133	11.96	189	13.29	
5028	Klhdc4_1	1.11	34	10.53	51	11.7	
5029	Magi1	1.11	85	2.64	128	2.94	
5030	Mill1	1.11	236	18.32	362	20.35	
5031	Ppp1r2	1.11	150	25.24	222	28.03	
5032	Herc3	1.11	110	4.71	172	5.23	
5033	Umps	1.11	71	14.6	106	16.22	
5034	AABR07016056.1	1.11	12	19.9	18	22.09	
5035	Ppfia1	1.11	155	11.57	238	12.85	
5036	Parp9	1.11	290	26.31	439	29.2	
5037	Rap1b	1.11	64	41.75	93	46.33	
5038	St13	1.11	104	55.33	119	61.4	
5039	Usp40	1.11	128	12.67	183	14.06	
5040	Cuedc2	1.11	42	7.42	67	8.24	
5041	Mblac2	1.11	58	2.75	66	3.05	
5042	Prkaa2	1.11	48	4.23	73	4.7	
5043	Sumf1	1.11	107	13.49	162	14.96	
5044	Zhx2	1.11	54	3.93	82	4.36	
5045	LOC690035	1.11	26	2.47	44	2.74	
5046	Smek1	1.11	232	19.58	339	21.72	
5047	Ppp1r3c	1.11	60	7.84	90	8.69	
5048	Brd4	1.11	635	27.55	999	30.55	
5049	Trim39	1.11	79	4.29	102	4.76	
5050	Unk	1.11	91	8.08	146	8.97	
5051	Nckap5l	1.11	95	6.75	144	7.49	
5052	Hbs1l	1.11	174	15.86	278	17.58	
5053	Kat7	1.11	246	24.98	371	27.69	
5054	Atf5	1.11	32	10.19	49	11.3	
5055	Eri2	1.11	29	3.04	42	3.37	
5056	Klf9	1.11	77	8.37	118	9.28	
5057	Zfp346	1.11	175	8.4	260	9.31	
5058	Cenpb	1.11	174	30.9	257	34.25	
5059	LOC100911537	1.11	165	7.47	279	8.28	
5060	Samd11	1.11	178	30.66	285	33.98	
5061	Max	1.11	125	20.39	190	22.59	
5062	Smad2	1.11	171	13.97	273	15.48	
5063	Ahdc1	1.11	127	4.94	194	5.48	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5064	Usp19	1.11	373	27.11	549	30.03	
5065	Bloc1s2	1.11	36	9.64	51	10.68	
5066	Mafk	1.11	86	11.09	138	12.28	
5067	Zbtb48	1.11	34	4.41	50	4.88	
5068	Dhx32	1.11	63	6.12	82	6.78	
5069	Zfp410	1.11	196	17.8	284	19.72	
5070	Drosha	1.11	243	16.98	362	18.8	
5071	Cd164	1.11	500	62.36	747	69.04	
5072	Map2k7	1.11	119	28.79	177	31.87	
5073	Rad17	1.11	68	6.81	111	7.54	
5074	Naa30	1.11	110	6.18	153	6.84	
5075	Plrg1	1.11	83	15.64	127	17.32	
5076	Rap2c	1.11	85	8.8	124	9.74	
5077	Bcap29	1.11	58	10.55	92	11.67	
5078	Ccdc14	1.11	44	1.83	65	2.03	
5079	Cluap1	1.11	83	9.14	121	10.11	
5080	Cpne2	1.11	30	5.27	51	5.84	
5081	LOC680039	1.11	18	1.35	26	1.49	
5082	Rnf139	1.11	58	6.65	84	7.36	
5083	Slc16a13	1.11	32	4.76	44	5.26	
5084	Zfp639	1.11	56	12.42	83	13.74	
5085	Hic2	1.11	28	2	52	2.22	
5086	Trpm4	1.11	27	1.86	46	2.06	
5087	Ptms	1.11	351	118.25	535	130.82	
5088	Rbsn	1.11	168	10.63	238	11.76	
5089	Braf	1.11	182	11.18	309	12.36	
5090	Slc15a4	1.11	81	9.68	116	10.71	
5091	Vamp3	1.11	188	35.31	302	39.05	
5092	Cc2d2a	1.11	154	7.1	219	7.85	
5093	Fam160a1	1.11	87	8.76	129	9.69	
5094	Lin54	1.11	63	4.03	93	4.46	
5095	Uhrf2	1.11	255	14.58	402	16.12	
5096	Cyth2	1.11	155	32.58	235	36.02	
5097	Msl3	1.11	117	15.17	173	16.77	
5098	Rcc2	1.11	146	39.48	234	43.64	
5099	Rab22a	1.11	186	8.39	304	9.27	
5100	Clasp1	1.11	358	17.34	509	19.17	
5101	Ndufaf5	1.11	36	7.28	57	8.05	
5102	Zfp846	1.11	39	5.07	58	5.6	
5103	Abcd2	1.11	44	1.51	55	1.67	
5104	Col1a2	1.11	0	1.86	0	2.06	
5105	Dhfr	1.11	52	3.56	75	3.93	
5106	Fkbp8	1.11	299	60.53	465	66.89	
5107	Nsun5	1.11	26	5.3	39	5.85	
5108	Unc79	1.11	37	1.1	49	1.21	
5109	Thrap3	1.11	653	55.72	967	61.57	
5110	Ino80d	1.1	131	9.35	185	10.33	
5111	Lmbrd2	1.1	70	6.81	112	7.53	
5112	Coa5	1.1	137	16.47	199	18.19	
5113	Snx7	1.1	53	9.09	84	10.04	
5114	Dnajc7	1.1	283	35.21	413	38.88	
5115	Maf1	1.1	184	38.79	274	42.84	
5116	Kif16b	1.1	188	7.86	259	8.68	
5117	Erlec1	1.1	164	24.34	244	26.87	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5118	Lats2	1.1	243	15.34	372	16.93	
5119	Mbtps2	1.1	96	3.74	154	4.12	
5120	Paip2	1.1	50	55.99	87	61.79	
5121	Chd6	1.1	518	14.28	783	15.75	
5122	Fbxo33	1.1	98	8.96	136	9.89	
5123	Tnrc18	1.1	891	26.64	1369	29.39	
5124	Eif2b4	1.1	70	14.1	101	15.56	
5125	Rpl41	1.1	442	395.58	659	436.28	
5126	Bok	1.1	352	67.5	541	74.44	
5127	Dazap1	1.1	170	18.82	225	20.75	
5128	Ndufs5	1.1	37	27.8	49	30.65	
5129	Gnpnat1	1.1	72	8.39	107	9.25	
5130	Pi4k2a	1.1	133	22.43	181	24.73	
5131	Bclaf1	1.1	647	17	873	18.74	
5132	Tcof1	1.1	158	11.84	224	13.06	
5133	Yy1	1.1	186	31.66	271	34.89	
5134	Dgkq	1.1	109	7.74	167	8.53	
5135	Smim14	1.1	132	33.54	232	36.97	
5136	Abcb1a	1.1	3957	71.97	6163	79.3	
5137	Exo5	1.1	19	3.41	28	3.76	
5138	Wbscr22	1.1	41	9.59	65	10.56	
5139	Wibg	1.1	74	11.82	88	13.02	
5140	Eaf1	1.1	61	4.25	91	4.69	
5141	Trim41	1.1	141	13.42	208	14.78	
5142	Arfp2	1.1	95	15.1	135	16.63	
5143	Ikbip	1.1	122	8.59	134	9.46	
5144	Impact	1.1	194	17.77	277	19.57	
5145	LOC103689943	1.1	0	9.4	0	10.34	
5146	Rab33b	1.1	58	5.94	89	6.54	
5147	Cog4	1.1	211	19.06	305	20.99	
5148	Wnk1	1.1	863	25.22	1285	27.76	
5149	Hus1	1.1	59	2.81	82	3.09	
5150	Tmf1	1.1	170	13.88	239	15.28	
5151	Ctps1	1.1	134	16.82	228	18.51	
5152	Selt	1.1	97	32.95	140	36.26	
5153	Sdhc	1.1	270	78.22	392	86.06	
5154	Timm17a	1.1	60	21.23	88	23.36	
5155	Mcart1_2	1.1	139	24.87	204	27.36	
5156	Rbm12_1	1.1	24	13.33	24	14.66	
5157	Rcbtb2	1.1	121	12.17	183	13.39	
5158	Ulk1	1.1	248	16.81	359	18.49	
5159	Asxl1	1.1	308	18.18	433	19.99	
5160	Dnajc12	1.1	19	4.92	28	5.41	
5161	Dus2	1.1	27	3.18	38	3.5	
5162	Kansl1l	1.1	78	4.14	149	4.55	
5163	Prkrip1	1.1	94	6.04	138	6.64	
5164	Srp19	1.1	22	8.13	36	8.94	
5165	Zfp35	1.1	33	4.38	52	4.82	
5166	Arl8b	1.1	204	24.82	301	27.29	
5167	Nfx1	1.1	299	16.94	433	18.62	
5168	Kmt2e	1.1	530	20.64	770	22.69	
5169	Parg	1.1	182	10.66	263	11.72	
5170	Foxp4	1.1	116	7.18	189	7.89	
5171	Ppp3cb	1.1	158	14.03	244	15.42	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5172	Prr12	1.1	237	12.73	348	13.98	
5173	Cpsf3	1.1	154	21.4	213	23.52	
5174	Srsf10	1.1	150	20.05	210	22.03	
5175	Ddx21	1.1	198	24.47	285	26.88	
5176	Urb1	1.1	145	5.66	205	6.21	
5177	Pdzd11	1.1	49	8.6	71	9.45	
5178	Tmem183a	1.1	176	21.6	256	23.72	
5179	Map7d1	1.1	203	19.51	284	21.43	
5180	Ptprj	1.1	95	3.08	141	3.38	
5181	Tbc1d31	1.1	47	3.11	69	3.41	
5182	Ctnnd1	1.1	1009	64.05	1463	70.31	
5183	Acp1	1.1	49	11.02	64	12.1	
5184	Lrwd1	1.1	52	7.67	80	8.42	
5185	Anxa5	1.1	696	145.48	1052	159.64	
5186	Prmt3	1.1	76	8.18	110	8.97	
5187	Psen2	1.1	101	13.55	156	14.86	
5188	Cul1	1.1	273	24.63	417	27.02	
5189	Rps24	1.1	107	177.31	176	194.49	
5190	Fmnl3	1.1	152	17.54	224	19.24	
5191	Hadha	1.1	469	48.14	670	52.8	
5192	Ogn_1	1.1	911	254.4	1184	278.97	
5193	Smad5	1.1	172	23.59	251	25.87	
5194	Arpin	1.1	50	4.26	69	4.67	
5195	Atg5	1.1	115	11.21	136	12.29	
5196	Ccdc94_1	1.1	38	7.88	58	8.64	
5197	Gmeb2	1.1	69	4.79	99	5.25	
5198	MGC95210	1.1	38	3.34	43	3.66	
5199	Parp12	1.1	71	7.68	105	8.42	
5200	Stil	1.1	38	2.27	55	2.49	
5201	Zfp192	1.1	94	3.7	133	4.06	
5202	Lmna	1.1	276	30.56	409	33.51	
5203	Dtx3l	1.1	199	14.06	291	15.41	
5204	Dpy19l3	1.1	149	6.23	226	6.83	
5205	Pias1	1.1	123	14.17	183	15.52	
5206	Topors	1.1	164	13.28	249	14.54	
5207	Tcerg1	1.1	318	18.69	453	20.47	
5208	Ice2	1.1	87	6.06	134	6.63	
5209	Plcg1	1.09	693	46.63	1021	51.06	
5210	Trmt6	1.09	33	3.48	51	3.81	
5211	Abrac1	1.09	134	51.14	238	55.98	
5212	Pacs2	1.09	216	17.28	295	18.92	
5213	Pde10a	1.09	205	8.42	275	9.22	
5214	Zfp207	1.09	340	66.41	510	72.7	
5215	Mrps2	1.09	100	8.51	145	9.32	
5216	H1fx	1.09	41	25.64	60	28.05	
5217	Polr1b	1.09	45	3.95	74	4.32	
5218	Sdhd	1.09	264	75.74	376	82.86	
5219	Ythdf2	1.09	163	21.33	240	23.34	
5220	Ube2i	1.09	94	81.98	211	89.66	
5221	Klc2	1.09	151	16.63	213	18.18	
5222	Mtmt10	1.09	89	5.22	116	5.71	
5223	Top3a	1.09	99	7.75	147	8.48	
5224	Csnk1a1	1.09	769	100.62	1197	110.02	
5225	Foxj3	1.09	189	12.02	260	13.14	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5226	Arhgef39	1.09	24	2.05	37	2.24	
5227	Clp1	1.09	27	5.22	38	5.7	
5228	Dcaf10	1.09	123	4.65	190	5.08	
5229	Las1l	1.09	114	9.96	173	10.88	
5230	Epb41l4b	1.09	28	0.65	25	0.7	
5231	LOC100360573_2	1.09	5	23.59	4	25.78	
5232	Lrrc28	1.09	30	1.61	40	1.75	
5233	Zfp248	1.09	24	1.25	34	1.37	
5234	Cdh2	1.09	1107	81.94	1653	89.52	
5235	Osbp	1.09	292	22.1	425	24.14	
5236	Rab31	1.09	150	11.04	218	12.06	
5237	Acox1	1.09	314	22.58	436	24.65	
5238	Ift140	1.09	218	10.75	280	11.73	
5239	Lrp6	1.09	209	13.47	295	14.7	
5240	Eil	1.09	147	11.2	239	12.22	
5241	MGC94199_1	1.09	0	6.91	0	7.53	
5242	Bloc1s1	1.09	44	24.45	66	26.67	
5243	Trafd1	1.09	180	22.32	279	24.35	
5244	Pdia6	1.09	826	169.16	1203	184.49	
5245	Ezr	1.09	120	13.36	169	14.57	
5246	Slc39a6	1.09	224	22.52	343	24.56	
5247	Cd47	1.09	322	45.41	509	49.51	
5248	Med19	1.09	74	10.06	113	10.97	
5249	Pcdhga8	1.09	22	3.58	32	3.91	
5250	RGD1307830	1.09	34	6.47	49	7.05	
5251	Rps6	1.09	0	11.68	0	12.73	
5252	Lrp6	1.09	294	14.59	412	15.9	
5253	Cggbp1	1.09	367	30.21	540	32.93	
5254	Pum1	1.09	552	28.01	826	30.53	
5255	Setdb1	1.09	279	16.9	387	18.42	
5256	Tnrc6b	1.09	751	12.35	1091	13.45	
5257	Adam15	1.09	165	19.6	236	21.35	
5258	Cep89	1.09	51	4.41	67	4.8	
5259	Ints12	1.09	35	7.06	54	7.69	
5260	Tpm3	1.09	373	46.43	519	50.58	
5261	Ncaph2	1.09	219	31.22	325	34	
5262	Rc3h2	1.09	346	19.18	532	20.89	
5263	Usp3	1.09	187	15.09	240	16.43	
5264	Ndufb7	1.09	128	74.37	180	80.96	
5265	Znf740	1.09	201	16.94	306	18.44	
5266	Dock3	1.09	294	8.25	440	8.98	
5267	Efcab14	1.09	211	12.19	318	13.26	
5268	Prpf40a	1.09	251	21.64	358	23.54	
5269	Pphln1	1.09	221	8.57	331	9.32	
5270	Col24a1	1.09	22	0.98	32	1.07	
5271	Sirt1	1.09	106	9.23	168	10.03	
5272	AABR07067760.1	1.09	28	29.83	37	32.44	
5273	Aldh5a1	1.09	28	1.47	40	1.59	
5274	Dok2	1.09	14	1.42	21	1.54	
5275	Fam102a	1.09	39	3.02	58	3.28	
5276	Fam133b	1.09	49	5.4	66	5.87	
5277	Immp1l	1.09	42	6.32	56	6.87	
5278	Jrkl	1.09	22	2.75	32	2.99	
5279	Mrpl21	1.09	28	8.46	40	9.21	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5280	Nup160	1.09	75	5.41	99	5.89	
5281	Pot1	1.09	78	7.21	120	7.84	
5282	Rbm48	1.09	10	1.94	18	2.11	
5283	Ric8b	1.09	146	5.65	180	6.14	
5284	Sertad3	1.09	15	3.03	21	3.3	
5285	Syne1	1.09	37	0.27	46	0.29	
5286	Arhgdia	1.09	938	181.42	1367	197.26	
5287	Hp1bp3	1.09	611	53.16	907	57.8	
5288	Ogfr	1.09	177	25.77	236	28.01	
5289	ldh2	1.09	320	44.71	473	48.59	
5290	RGD1564379	1.09	82	9.45	110	10.26	
5291	Eny2	1.09	68	9.37	111	10.18	
5292	Arpc5l	1.09	74	15.18	99	16.49	
5293	Brap	1.09	70	10.9	138	11.84	
5294	Exosc9	1.09	80	10.2	107	11.08	
5295	Myd88	1.09	52	7.81	81	8.48	
5296	Add1	1.09	751	59.39	1125	64.49	
5297	Dynlt3	1.09	43	7.09	64	7.7	
5298	Fbxo42	1.09	189	9.55	272	10.37	
5299	Pnrc2	1.09	224	35.46	328	38.51	
5300	Daam1	1.09	352	16.52	490	17.93	
5301	Riok2	1.09	80	12.2	122	13.25	
5302	Taf10	1.09	77	28.73	109	31.19	
5303	Cipc	1.09	120	9.45	178	10.25	
5304	Senp5	1.09	0	4.98	0	5.41	
5305	Sept11	1.09	672	36.96	977	40.11	
5306	Plxnb1	1.08	149	8.83	227	9.58	
5307	Camk2d	1.08	270	16.61	368	18.01	
5308	Anapc5	1.08	776	96.73	1155	104.92	
5309	Smarcal1	1.08	101	8.35	122	9.06	
5310	Cstf2t	1.08	202	20.5	293	22.24	
5311	LOC102546354	1.08	26	2.32	24	2.51	
5312	Rabl2a	1.08	47	7.74	73	8.39	
5313	Tmem87a	1.08	140	6.31	195	6.84	
5314	Bend3	1.08	43	3.65	61	3.96	
5315	Cnppd1	1.08	148	22.91	210	24.83	
5316	Cntln	1.08	44	2.89	73	3.13	
5317	Etfb	1.08	29	7.98	38	8.65	
5318	Nars2	1.08	45	3.18	82	3.45	
5319	Rbfa	1.08	55	8.9	69	9.65	
5320	Zdhhc21	1.08	52	4.02	73	4.36	
5321	Tnip1	1.08	205	22.5	303	24.38	
5322	Abr	1.08	94	8.53	140	9.24	
5323	Etf1	1.08	253	33.13	363	35.9	
5324	Thap4	1.08	102	12.96	144	14.04	
5325	Fam3c	1.08	127	17.8	189	19.29	
5326	Isy1	1.08	72	12	94	12.99	
5327	Kif21a	1.08	84	3.54	114	3.83	
5328	RGD1306746	1.08	74	7.15	101	7.74	
5329	Orc5	1.08	113	12.24	153	13.26	
5330	Eif4enif1	1.08	148	13.58	226	14.71	
5331	Rpa2	1.08	69	9.88	101	10.7	
5332	Armcx5	1.08	28	6.16	42	6.67	
5333	Fktn	1.08	210	11.36	319	12.29	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5334	Utp20	1.08	212	7.51	328	8.13	
5335	Chmp2b	1.08	104	14.62	149	15.83	
5336	Cbll1	1.08	105	8.56	157	9.27	
5337	Ak3	1.08	222	39.12	361	42.34	
5338	Bysl	1.08	47	8.06	61	8.72	
5339	Gsto2_1	1.08	14	7.9	18	8.55	
5340	Smurf2	1.08	173	12.16	259	13.15	
5341	Zfp637	1.08	90	24.48	142	26.49	
5342	Aptx	1.08	71	9.74	99	10.54	
5343	Tmem263	1.08	224	12.63	289	13.67	
5344	Wdr46	1.08	57	5.91	77	6.4	
5345	Mtch2	1.08	166	53.25	230	57.59	
5346	Paf1	1.08	156	27.91	229	30.19	
5347	Add3	1.08	284	20.2	433	21.84	
5348	Adnp	1.08	589	32.5	876	35.14	
5349	Trim23	1.08	86	6.98	107	7.54	
5350	Chd1	1.08	164	8.93	251	9.65	
5351	Naa25	1.08	159	8.23	207	8.89	
5352	Dlc1	1.08	99	6.6	150	7.14	
5353	LOC100909609	1.08	370	13.31	534	14.38	
5354	Dsg2	1.08	277	11.25	436	12.16	
5355	Dnmt3a	1.08	126	7.77	188	8.39	
5356	Znfx1	1.08	133	4.61	185	4.98	
5357	Pkn3	1.08	367	9.64	469	10.42	
5358	AABR07026969.1	1.08	9	0.58	15	0.63	
5359	Cdc26	1.08	74	12.4	92	13.39	
5360	Cntrob	1.08	24	1.98	35	2.14	
5361	Ctps2	1.08	290	26.89	449	29.04	
5362	Cwc15	1.08	56	14.5	72	15.66	
5363	Ddx39a	1.08	131	16.06	164	17.34	
5364	Ptbp3	1.08	325	33.73	496	36.43	
5365	Rpp14	1.08	68	14.78	101	15.96	
5366	Rrs1	1.08	18	4.03	26	4.36	
5367	Srr	1.08	109	9.63	141	10.4	
5368	Tgm4	1.08	30	2.26	46	2.44	
5369	Tmem9b	1.08	71	4.82	96	5.2	
5370	Acta1	1.08	9	2.27	12	2.45	
5371	Ankrd6	1.08	17	0.65	26	0.7	
5372	Caskin2	1.08	121	8.68	174	9.38	
5373	Cntf	1.08	11	2.98	13	3.22	
5374	Dr1_2	1.08	0	4.67	0	5.04	
5375	Gfra3	1.08	9	1.47	13	1.58	
5376	Gnpda2	1.08	9	1.79	17	1.94	
5377	Gse1	1.08	67	2.94	83	3.17	
5378	Mrps26	1.08	18	6.73	27	7.27	
5379	Mybl1	1.08	15	0.66	23	0.71	
5380	Pmaip1	1.08	9	1.18	13	1.27	
5381	RGD1305455	1.08	41	2.5	53	2.7	
5382	RT1-T24-1	1.08	71	2.85	70	3.08	
5383	Slc9a7	1.08	103	1.27	114	1.37	
5384	SNORD66	1.08	0	86.9	0	93.84	
5385	Tmem51	1.08	48	4.49	70	4.84	
5386	Ttll5	1.08	66	3.24	89	3.5	
5387	Zdbf2	1.08	18	0.6	28	0.65	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5388	Zfp362	1.08	77	12.96	113	14	
5389	Zfp964	1.08	18	4.23	26	4.56	
5390	Ubr2	1.08	477	22.71	706	24.52	
5391	Igf1r	1.08	1964	110.89	3256	119.67	
5392	Nip30	1.08	120	18.6	174	20.07	
5393	Ube2g2	1.08	108	16.61	160	17.92	
5394	Ilf3	1.08	357	25.93	513	27.98	
5395	Golga7	1.08	191	40.19	294	43.35	
5396	Fam13c	1.08	276	22.08	345	23.81	
5397	Ski	1.08	212	26.42	348	28.49	
5398	Hars	1.08	110	19.54	168	21.07	
5399	Kif20a	1.08	50	6.45	69	6.95	
5400	Htra2	1.08	59	10.78	77	11.63	
5401	Yipf5	1.08	164	17.47	240	18.84	
5402	Qrich1	1.08	364	27.29	539	29.41	
5403	Dnlz	1.08	43	9.89	63	10.66	
5404	Taf1	1.08	121	7.92	176	8.54	
5405	Cblb	1.08	319	11.59	466	12.49	
5406	Ubtf	1.08	345	24.92	494	26.86	
5407	Luc7l3	1.08	248	26.09	389	28.12	
5408	Kpna6	1.08	251	17.89	354	19.28	
5409	Nup98	1.08	420	18.35	595	19.78	
5410	Lyn	1.08	53	3.59	82	3.87	
5411	Ube3a	1.08	197	8.2	308	8.83	
5412	Vps51	1.08	98	15.74	127	16.96	
5413	Dcp1b	1.08	64	6.09	100	6.56	
5414	Mex3d	1.08	117	15.65	168	16.86	
5415	Ube3c	1.08	275	17.83	379	19.21	
5416	Adgrl2	1.08	384	19.55	588	21.07	
5417	Fam104a	1.08	85	11.99	129	12.92	
5418	Mon2	1.08	366	16.65	531	17.94	
5419	Sos1	1.08	239	11.05	371	11.9	
5420	Comt	1.08	143	24.12	225	25.98	
5421	Fam98b	1.08	24	6.95	29	7.48	
5422	Med30	1.08	33	10.12	50	10.9	
5423	Nfya	1.08	230	20.67	322	22.25	
5424	Snapc4	1.08	37	2.26	55	2.43	
5425	Tfap4	1.08	42	3.76	61	4.05	
5426	Uba3	1.08	196	29.27	311	31.51	
5427	Csnk1d	1.08	460	33.86	718	36.45	
5428	Vdac3	1.08	309	76.24	454	82.07	
5429	Sugt1	1.08	118	18.87	175	20.31	
5430	Slc25a16	1.08	96	3.69	154	3.97	
5431	Irf3	1.08	184	26.83	264	28.87	
5432	Seh1l	1.08	301	5.03	463	5.41	
5433	Fam110b	1.08	41	9.08	59	9.77	
5434	Lrrc49	1.08	62	5	87	5.38	
5435	Smyd5	1.08	49	6.77	69	7.29	
5436	Tbl2	1.08	72	4.84	91	5.2	
5437	Zfp326	1.08	143	13.65	203	14.68	
5438	Rab23	1.08	165	11.76	264	12.65	
5439	Gripap1	1.08	218	17.49	256	18.8	
5440	Atad2b	1.08	162	5.73	251	6.16	
5441	Srsf1	1.08	490	34.46	718	37.04	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5442	Alms1	1.08	199	5.09	256	5.48	
5443	Ubr3	1.08	211	9.77	312	10.5	
5444	Rnf111	1.07	234	13.69	360	14.72	
5445	Elovl4	1.07	17	1.88	26	2.02	
5446	Ska3	1.07	33	2.59	39	2.79	
5447	Coq4	1.07	22	3.68	38	3.95	
5448	Ctsc	1.07	22	3.09	38	3.32	
5449	Haus7	1.07	20	2.92	29	3.14	
5450	LOC102549842	1.07	96	3.62	167	3.89	
5451	LOC691920	1.07	165	2.74	255	2.94	
5452	Map3k2	1.07	85	5.92	117	6.36	
5453	Mylk	1.07	63	2.17	90	2.33	
5454	Pat1	1.07	161	12.99	249	13.96	
5455	Pcca	1.07	70	5.14	108	5.53	
5456	Trim37	1.07	136	8.04	197	8.64	
5457	Txnl1	1.07	200	43.75	284	47.02	
5458	Dhx15	1.07	318	39.13	468	42.04	
5459	Tgs1	1.07	116	7.32	169	7.86	
5460	Csnk2a1	1.07	344	53.05	497	56.99	
5461	LOC100911993	1.07	157	6.17	209	6.63	
5462	Mt-nd4	1.07	4996	1328.2	7216	1426.1	
5463	Bmpr2	1.07	1376	88.9	1948	95.43	
5464	RGD1304704	1.07	197	50.23	292	53.91	
5465	Ost4	1.07	64	38.7	89	41.54	
5466	RGD1308106	1.07	177	12.32	258	13.22	
5467	AABR07037528.1	1.07	23	6.78	33	7.27	
5468	Fdxacb1	1.07	32	4.75	37	5.09	
5469	Harbi1	1.07	27	3.44	39	3.69	
5470	Leo1	1.07	55	6.32	87	6.78	
5471	Zfp646	1.07	232	14.78	331	15.85	
5472	Plp2	1.07	98	49.2	119	52.77	
5473	Ddx19a	1.07	427	11.28	634	12.09	
5474	Col5a1	1.07	1088	57.65	1605	61.82	
5475	Nup133	1.07	121	9.89	168	10.61	
5476	Fn3krp	1.07	58	7.61	79	8.16	
5477	Itpa	1.07	113	32.25	170	34.58	
5478	Prosc	1.07	61	9.37	94	10.05	
5479	Usp28	1.07	250	14.13	387	15.14	
5480	Glcci1	1.07	140	6.66	211	7.14	
5481	Lonrf1	1.07	54	4.35	63	4.66	
5482	Lsm14b	1.07	89	16.47	116	17.65	
5483	Poc5	1.07	41	2.35	61	2.51	
5484	AI314180	1.07	368	21.43	557	22.96	
5485	Hsf2	1.07	130	13.8	213	14.78	
5486	Sgpl1	1.07	336	24.83	498	26.6	
5487	Col4a1	1.07	141	7.37	198	7.9	
5488	Spred2	1.07	71	7.9	117	8.46	
5489	Cflar	1.07	114	5.87	178	6.28	
5490	Nek7	1.07	49	12.17	85	13.03	
5491	Pigg	1.07	0	2.55	0	2.73	
5492	Trim21	1.07	46	3.28	62	3.52	
5493	Actr10	1.07	113	26.06	172	27.89	
5494	Cbx5	1.07	63	12.55	88	13.43	
5495	Elmod2	1.07	15	3.87	43	4.14	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5496	Man1a2	1.07	126	10.62	180	11.36	
5497	Mta2	1.07	364	43.26	526	46.29	
5498	Cask_2	1.07	173	23.49	252	25.13	
5499	Adam17	1.07	329	26.27	481	28.11	
5500	Hdgf	1.07	451	82.92	629	88.71	
5501	Atxn2	1.07	285	19.32	452	20.67	
5502	LOC606294	1.07	74	9.13	108	9.77	
5503	Strap	1.07	136	33.99	191	36.36	
5504	LOC691807	1.07	72	24.14	102	25.82	
5505	Psmc8	1.07	287	63.17	414	67.54	
5506	Ccnk	1.07	114	13.05	176	13.95	
5507	Adamts10	1.07	431	28.26	663	30.21	
5508	Podxl2	1.07	141	21.11	195	22.57	
5509	Tpt1	1.07	845	557.03	1300	594.98	
5510	Akr1b8	1.07	23	2.05	33	2.19	
5511	Ap4e1	1.07	76	4.89	108	5.22	
5512	Arl15	1.07	82	4.14	160	4.42	
5513	Asap3	1.07	20	0.93	23	1	
5514	Asxl3	1.07	14	0.38	28	0.41	
5515	Igfbp2	1.07	14	3.96	20	4.23	
5516	Kremen1	1.07	54	4.01	80	4.29	
5517	LOC100361475	1.07	0	1.68	0	1.79	
5518	LOC100910164	1.07	1	2.88	4	3.08	
5519	Map6	1.07	51	1.45	87	1.55	
5520	Nxph2	1.07	7	3.26	10	3.48	
5521	Ppm1b	1.07	248	10.61	377	11.33	
5522	Ppp1r3d	1.07	7	0.83	10	0.88	
5523	Rbm20	1.07	13	0.38	19	0.41	
5524	RGD1310553	1.07	63	6.66	96	7.12	
5525	Ror1	1.07	11	0.49	14	0.52	
5526	Rpl35a_3	1.07	0	7.68	0	8.2	
5527	Snopc3	1.07	92	12.52	151	13.37	
5528	Stx1a	1.07	40	2.35	52	2.51	
5529	Tfdp2	1.07	65	3.69	87	3.94	
5530	Timp3	1.07	11	2.9	14	3.1	
5531	Tmem19	1.07	19	4.01	28	4.29	
5532	Tmem29	1.07	17	15.09	29	16.11	
5533	Ust	1.07	39	1.24	87	1.33	
5534	Palm2	1.07	64	1.72	81	1.84	
5535	Sap25	1.07	7	2.14	12	2.29	
5536	Slc25a14	1.07	22	1.41	33	1.5	
5537	Tmem179b	1.07	52	20.55	85	21.95	
5538	Sh3tc2	1.07	307	13.29	492	14.19	
5539	Shmt2	1.07	119	19.19	163	20.48	
5540	Prpf38b	1.07	133	12.22	198	13.04	
5541	Aplp2	1.07	1263	124.54	1809	132.87	
5542	Snx33	1.07	393	35.02	598	37.36	
5543	Dctn2	1.07	443	72.34	661	77.16	
5544	Nrf1	1.07	124	7.73	216	8.24	
5545	Ncoa1	1.07	284	11.16	420	11.91	
5546	Limk2	1.07	107	6.15	129	6.56	
5547	Mdm4	1.07	203	12.98	305	13.84	
5548	Txnrd2	1.07	111	11.19	163	11.93	
5549	Angel2	1.07	122	11.05	169	11.78	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5550	Epg5	1.07	211	7.28	286	7.76	
5551	Pigu	1.07	233	18.99	363	20.25	
5552	Skp1	1.07	443	101.83	644	108.56	
5553	Usp42	1.07	100	6.36	145	6.78	
5554	Rab10	1.07	357	38.57	542	41.11	
5555	Sec24c	1.07	372	28.48	529	30.35	
5556	Yars	1.07	108	12.95	153	13.8	
5557	Brd8	1.07	1240	90.89	1746	96.84	
5558	Zfp692	1.07	62	6.6	72	7.03	
5559	Jam2	1.07	33	7.39	46	7.88	
5560	Kifc3	1.07	41	4.35	70	4.64	
5561	Btrc	1.07	350	11.57	507	12.33	
5562	Fhdc1	1.07	173	13.49	249	14.36	
5563	Cpsf2	1.07	271	16.37	400	17.44	
5564	Tbl1x	1.07	480	29.38	695	31.29	
5565	Pdpm	1.06	69	12.9	99	13.74	
5566	RGD1311847	1.06	52	5.19	76	5.53	
5567	Ttc26	1.06	65	3.67	80	3.91	
5568	Rnf20	1.06	194	14.71	275	15.65	
5569	Cyp20a1	1.06	83	10.77	132	11.46	
5570	Nab1	1.06	73	4.72	120	5.03	
5571	Akr1b1	1.06	3236	955.5	4567	1017	
5572	Nynrin	1.06	122	7.22	178	7.69	
5573	Ikbkap	1.06	207	14.76	281	15.71	
5574	Mut	1.06	74	6.67	94	7.1	
5575	Nme1	1.06	29	12.79	42	13.61	
5576	Ung	1.06	64	10.05	91	10.69	
5577	Dgkd	1.06	129	10	197	10.64	
5578	Rad18	1.06	34	3.82	71	4.06	
5579	Sntb2	1.06	74	5.54	100	5.9	
5580	Zfp319	1.06	60	8.37	79	8.91	
5581	Slc39a9	1.06	258	16.62	378	17.68	
5582	Kdm5b	1.06	540	27.36	782	29.11	
5583	Klhl9	1.06	274	25.18	410	26.78	
5584	Trim35	1.06	680	52.23	1025	55.55	
5585	Mbnl2	1.06	1117	56.72	1757	60.32	
5586	Rsrp1	1.06	381	47.75	550	50.78	
5587	Prkag2	1.06	182	10.35	332	11	
5588	Chuk	1.06	125	7.6	180	8.08	
5589	Ccm2	1.06	167	19.84	244	21.09	
5590	Sh2b1	1.06	154	15.08	218	16.03	
5591	Cwc22	1.06	75	8.83	105	9.38	
5592	RGD1308706	1.06	116	15.95	187	16.95	
5593	Cecr2	1.06	61	3.04	93	3.23	
5594	Cep70	1.06	35	2.36	63	2.5	
5595	Deptor	1.06	194	22.06	312	23.44	
5596	Eif3m	1.06	203	52.96	288	56.26	
5597	Inpp4a	1.06	108	6.06	206	6.44	
5598	Mettl4	1.06	22	1.92	30	2.04	
5599	Mlh3	1.06	50	2.5	72	2.65	
5600	PVR	1.06	47	6.36	80	6.75	
5601	Sirpa	1.06	22	1.71	30	1.81	
5602	Sypl1	1.06	99	17.56	126	18.66	
5603	Kdsr	1.06	66	6.4	104	6.8	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5604	Riok3	1.06	530	30.43	811	32.33	
5605	Ssbp1	1.06	36	9.48	50	10.07	
5606	Mapk6	1.06	218	17.53	317	18.62	
5607	Sf3b1	1.06	988	63.58	1411	67.54	
5608	Cct7	1.06	355	61.32	507	65.11	
5609	Med12	1.06	126	7.6	156	8.07	
5610	Bhlhe40	1.06	122	18.13	175	19.25	
5611	Polr2g	1.06	105	39.48	148	41.92	
5612	Rfwd2	1.06	201	15.96	309	16.95	
5613	Slc30a9	1.06	222	25.3	324	26.86	
5614	Dhx29	1.06	123	8.94	184	9.49	
5615	Tnfrsf21	1.06	35	2.58	50	2.74	
5616	Wdr3	1.06	110	9.84	145	10.44	
5617	Med6	1.06	43	10.34	51	10.97	
5618	Nptn	1.06	215	28.62	317	30.37	
5619	Rn60_14_1002.4	1.06	10	7.24	15	7.68	
5620	Fabp5	1.06	30	15.52	44	16.47	
5621	Acss2	1.06	192	21.09	279	22.38	
5622	Ywhaz	1.06	820	120.99	1172	128.37	
5623	Ube2h	1.06	1298	83.73	1909	88.83	
5624	Golga5	1.06	104	10.42	151	11.05	
5625	Tmpo	1.06	985	47.03	1540	49.88	
5626	Ankrd26	1.06	63	2.29	80	2.43	
5627	Blmh	1.06	156	17.98	239	19.07	
5628	Sugp2	1.06	67	3.63	82	3.85	
5629	Kdm2a	1.06	557	26.8	808	28.41	
5630	Prdx4	1.06	195	75.45	276	79.98	
5631	Eif4g3	1.06	459	22.8	622	24.16	
5632	Pvrl2	1.06	246	24.41	355	25.86	
5633	Slc45a4	1.06	132	14.14	184	14.98	
5634	Fyco1	1.06	190	6.38	252	6.76	
5635	Usp8	1.06	311	24.14	478	25.57	
5636	Prpf4b	1.06	340	24.07	484	25.5	
5637	AABR07051947.1	1.06	17	10.97	23	11.62	
5638	AABR07069227.1	1.06	13	2.95	18	3.12	
5639	Brf2	1.06	58	9.43	77	9.99	
5640	Cptp	1.06	12	2.2	18	2.33	
5641	Erc5	1.06	98	6.02	135	6.38	
5642	Exosc2	1.06	44	6.94	57	7.35	
5643	Fam151b	1.06	36	3.18	53	3.37	
5644	Hsf1	1.06	84	9	127	9.53	
5645	LOC100910122	1.06	0	7.15	0	7.57	
5646	Lzts3	1.06	15	1.74	26	1.84	
5647	Rabif	1.06	23	7.3	21	7.73	
5648	Sdk1	1.06	41	0.65	57	0.69	
5649	Sec22c	1.06	21	4.78	38	5.06	
5650	Uimc1	1.06	183	12	227	12.71	
5651	Utp3	1.06	59	13.14	84	13.92	
5652	Wdyhv1	1.06	26	2.6	43	2.76	
5653	Zfp770	1.06	12	1.8	17	1.91	
5654	Rltpr	1.06	14	0.62	17	0.66	
5655	Wdr76	1.06	24	2.32	43	2.46	
5656	Tab1	1.06	140	13.7	194	14.5	
5657	Tmem57	1.06	120	10.71	186	11.34	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5658	Eri1	1.06	72	8.2	97	8.68	
5659	Rabac1	1.06	89	26.84	118	28.4	
5660	Rbbp8	1.06	146	10.87	206	11.5	
5661	Tubgcp4	1.06	79	8.02	129	8.48	
5662	Wdr37	1.06	141	8.81	201	9.32	
5663	LOC100912375	1.06	0	16.19	0	17.13	
5664	Larp1	1.06	342	33.5	499	35.43	
5665	Ezh2	1.06	126	10.63	185	11.24	
5666	Mrpl28	1.06	43	19.18	67	20.28	
5667	Rprd2	1.06	229	14.71	322	15.55	
5668	Dennd2a	1.06	166	8.32	250	8.8	
5669	Tsen15	1.06	32	9.27	48	9.8	
5670	Alg13	1.06	36	1.89	47	2	
5671	Cd3eap	1.06	29	5.15	43	5.44	
5672	Cyp27a1	1.06	114	13.84	170	14.63	
5673	Saa4	1.06	47	1.52	57	1.61	
5674	Lysmd3	1.06	47	5.27	69	5.56	
5675	Pik3cb	1.06	56	3.45	73	3.64	
5676	Ralgapa1	1.06	358	14.99	517	15.83	
5677	Plin3	1.06	466	107.22	651	113.25	
5678	Zeb1	1.06	96	6.71	121	7.09	
5679	Jmjd1c	1.06	558	17.84	762	18.84	
5680	Ube2l3	1.06	396	56.7	586	59.88	
5681	Psmc6	1.06	171	21.76	238	22.98	
5682	Jun	1.06	303	35.52	428	37.51	
5683	Rps18	1.06	18	267.58	37	282.56	
5684	Nedd4	1.06	4515	283.12	6482	298.96	
5685	Dlg5	1.06	216	11.25	315	11.88	
5686	Arhgap11a	1.06	36	2.95	48	3.12	
5687	Mkrr1	1.06	104	10.03	160	10.59	
5688	Phyhd1	1.06	28	4.88	31	5.15	
5689	Rev1	1.06	173	9.53	225	10.06	
5690	Rrp12	1.06	77	5.65	104	5.97	
5691	Vti1a	1.06	75	2.26	120	2.38	
5692	Zbtb40	1.06	52	3.07	80	3.24	
5693	Zfp821	1.06	147	12.72	249	13.43	
5694	Crbn	1.06	61	8.18	70	8.64	
5695	Eef1b2	1.06	316	122.83	460	129.62	
5696	Pafah1b1	1.06	618	41.16	884	43.43	
5697	Map1a	1.06	409	13.29	580	14.02	
5698	Fbxo28	1.05	141	17.66	204	18.62	
5699	B4galt7	1.05	86	15.24	117	16.08	
5700	Tollip	1.05	156	14.35	228	15.14	
5701	Edem1	1.05	201	23.47	290	24.75	
5702	Cdk12	1.05	204	8.32	273	8.77	
5703	Mt-nd5	1.05	3024	631.74	4306	666.08	
5704	Ccdc117	1.05	44	6.42	63	6.77	
5705	ENSRNOG000000059	1.05	119	9.62	177	10.14	
5706	Zfp41	1.05	88	8.18	128	8.62	
5707	Btg3	1.05	74	16.71	108	17.61	
5708	Bgn	1.05	189	28.06	263	29.57	
5709	Anxa6	1.05	542	64.69	763	68.16	
5710	C2cd5	1.05	75	3.46	115	3.65	
5711	Dedd2	1.05	28	3.58	32	3.77	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5712	Nat9	1.05	45	12.11	68	12.75	
5713	Syt1	1.05	89	1.78	133	1.87	
5714	Capzb	1.05	334	54.16	506	57.04	
5715	Csde1	1.05	190	70.61	253	74.35	
5716	Clic1	1.05	190	59.01	255	62.13	
5717	Dhx57	1.05	179	9.86	251	10.38	
5718	Il4r	1.05	316	28.16	411	29.65	
5719	Tox4	1.05	251	25.36	349	26.69	
5720	Gpn2	1.05	32	7.75	51	8.15	
5721	Ap5b1	1.05	26	2.73	39	2.87	
5722	Tars	1.05	150	16.41	202	17.26	
5723	Wsb2	1.05	265	60.5	371	63.65	
5724	Btg1	1.05	210	51.76	294	54.43	
5725	Zfp958	1.05	31	8.32	32	8.75	
5726	Bcl7b	1.05	56	7.17	95	7.53	
5727	Prmt6	1.05	32	3.5	30	3.68	
5728	Ddx5	1.05	1508	174.95	2130	183.91	
5729	Gosr1	1.05	213	14	306	14.72	
5730	Xiap	1.05	82	9.76	124	10.26	
5731	Cnot4	1.05	154	7.71	229	8.11	
5732	Cse1l	1.05	248	22.93	337	24.09	
5733	Arfgap2	1.05	330	40.8	472	42.86	
5734	Ets2	1.05	46	4.21	60	4.42	
5735	Pygo1	1.05	61	4.4	99	4.62	
5736	Snx5	1.05	121	14.52	151	15.25	
5737	Trmt10a	1.05	55	3.9	79	4.09	
5738	Wbp1l	1.05	529	34.2	776	35.92	
5739	Zfp191	1.05	88	20.73	121	21.77	
5740	Zfp281	1.05	132	15.54	186	16.31	
5741	Casc4	1.05	189	13.71	267	14.39	
5742	Rbm27	1.05	120	10.05	180	10.55	
5743	Commd9	1.05	82	17.67	101	18.54	
5744	Nup214	1.05	358	18.75	530	19.67	
5745	Vegfa	1.05	279	24.3	401	25.5	
5746	Pelp1	1.05	204	19.54	287	20.5	
5747	Tspan31	1.05	233	42.94	324	45.02	
5748	Ube2k	1.05	244	11.95	378	12.52	
5749	Twf1	1.05	163	21.92	215	22.98	
5750	Usp34	1.05	526	17.52	764	18.37	
5751	Sema3c	1.05	537	33.85	800	35.48	
5752	Nup155	1.05	111	8.38	164	8.78	
5753	Eef1a1	1.05	1825	1919.04	1713	2011.2	
5754	Adnp2	1.05	154	11.91	200	12.48	
5755	Metap1	1.05	163	18.13	216	19	
5756	Rtcb	1.05	139	35.13	190	36.79	
5757	Tor1aip2_2	1.05	186	34.86	303	36.51	
5758	Cd9	1.05	416	117.72	592	123.26	
5759	Copb1	1.05	480	49.66	676	51.99	
5760	Kptn	1.05	54	8.56	75	8.96	
5761	AABR07068163.1	1.05	9	1.9	15	1.98	
5762	Arid3b	1.05	18	0.44	26	0.46	
5763	Btbd1	1.05	358	35.56	518	37.22	
5764	Casp8	1.05	30	3.57	45	3.74	
5765	Ccbl2	1.05	10	1.33	22	1.39	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5766	Cdca2	1.05	26	1.99	33	2.08	
5767	Cp	1.05	28	2.39	42	2.5	
5768	Crem	1.05	72	3.11	107	3.25	
5769	Cxcl12	1.05	15	0.33	12	0.35	
5770	Ecel1	1.05	10	0.49	14	0.52	
5771	Entpd5	1.05	100	6.12	130	6.4	
5772	Fat3	1.05	16	0.13	19	0.14	
5773	Gabarapl2	1.05	118	31.84	165	33.33	
5774	Git2	1.05	271	20.87	371	21.84	
5775	Gmip	1.05	51	3.7	68	3.88	
5776	Irgm	1.05	9	0.8	12	0.84	
5777	Itgae	1.05	84	1.37	89	1.44	
5778	Irgb3bp	1.05	42	2.49	46	2.61	
5779	Kcnj14	1.05	5	0.66	7	0.69	
5780	Kihl14	1.05	18	0.89	25	0.93	
5781	LOC100910414	1.05	0	9.69	0	10.14	
5782	LOC100911516	1.05	0	13.23	0	13.85	
5783	LOC100912571	1.05	0	3.41	0	3.57	
5784	Lrrc8e	1.05	33	3.62	48	3.79	
5785	Mak16	1.05	40	7.43	49	7.77	
5786	Map2k1	1.05	158	22.58	227	23.64	
5787	Mlxipl	1.05	7	0.55	9	0.57	
5788	Ndufaf2	1.05	21	1.7	47	1.78	
5789	Neurl2	1.05	7	1.24	12	1.3	
5790	Nt5dc1	1.05	71	4.72	116	4.94	
5791	Nxt2	1.05	6	0.74	7	0.77	
5792	Otud7a	1.05	10	0.81	19	0.85	
5793	Pcdhb8	1.05	4	0.77	7	0.81	
5794	Pcdhga11	1.05	15	2.24	21	2.34	
5795	Pcdhga7	1.05	40	5.96	56	6.24	
5796	Rab14	1.05	150	33.7	238	35.27	
5797	RGD1305014	1.05	17	1.75	26	1.83	
5798	RGD1562747	1.05	27	2.94	36	3.08	
5799	Susd3	1.05	6	1.42	8	1.48	
5800	Tmco4	1.05	32	1.6	37	1.68	
5801	Tmem120b	1.05	15	2.26	23	2.36	
5802	Tmem151a	1.05	28	1.46	29	1.53	
5803	Trim11	1.05	80	7.79	131	8.16	
5804	U2af1	1.05	166	26.65	269	27.89	
5805	Zfp664	1.05	9	13.82	7	14.46	
5806	Zfp872	1.05	12	1.3	10	1.36	
5807	Dmpk	1.05	48	2.61	81	2.73	
5808	Fastkd3	1.05	49	5.6	73	5.87	
5809	Fh	1.05	101	20.53	143	21.49	
5810	Hist1h2bk	1.05	4	4.75	7	4.97	
5811	Ift81	1.05	72	8.03	97	8.41	
5812	Naa11	1.05	5	0.56	8	0.59	
5813	Qtrtd1	1.05	16	2.89	29	3.03	
5814	SNORD28	1.05	5	23.21	7	24.29	
5815	Spin2a	1.05	12	9.48	19	9.92	
5816	Tex14	1.05	104	0.38	160	0.4	
5817	Tmem246	1.05	182	37.84	259	39.61	
5818	Slc39a10	1.05	588	41.29	821	43.18	
5819	Lonp2	1.05	240	15.64	371	16.35	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5820	Osbpl5	1.05	365	25.94	517	27.13	
5821	Wash1	1.05	126	23.36	175	24.42	
5822	Atic	1.05	215	30.03	301	31.38	
5823	Tbce	1.05	203	16.03	280	16.75	
5824	Pafah1b2	1.05	208	34.38	300	35.93	
5825	Cdk2	1.04	104	14.53	166	15.18	
5826	Gsk3b	1.04	222	28.59	348	29.87	
5827	Azi2	1.04	130	13.57	186	14.18	
5828	Rcor1_1	1.04	70	25.65	107	26.8	
5829	Dnajc3	1.04	165	30.75	230	32.12	
5830	Mkxn2	1.04	89	11.97	125	12.5	
5831	Mettl3	1.04	204	23.91	308	24.97	
5832	RGD621098	1.04	107	9.79	141	10.22	
5833	Nufip2	1.04	111	21.1	155	22.04	
5834	Mxd1	1.04	64	4.23	96	4.42	
5835	Tyw1	1.04	61	7.09	79	7.4	
5836	Cldnd1	1.04	218	38.26	303	39.94	
5837	Mvb12a	1.04	108	32.36	151	33.77	
5838	LOC100362640	1.04	5	270.77	10	282.56	
5839	Zc3h14	1.04	231	17.34	329	18.1	
5840	Prpf19	1.04	556	94.37	780	98.47	
5841	Gid4	1.04	98	7.47	139	7.79	
5842	Tada2a	1.04	92	7.41	109	7.73	
5843	Trappc12	1.04	169	17.1	244	17.84	
5844	Atp6v1h	1.04	137	19.89	205	20.74	
5845	Zgpat	1.04	41	6.97	59	7.27	
5846	Sar1a	1.04	557	42.27	751	44.07	
5847	Ii13ra1	1.04	14	20.07	21	20.92	
5848	Sdccag3	1.04	205	22.89	300	23.85	
5849	Atp6v1e1	1.04	182	39.44	293	41.08	
5850	Cnih4	1.04	176	31.53	263	32.84	
5851	Polg	1.04	149	12.97	214	13.51	
5852	Hdac8	1.04	103	5.16	146	5.37	
5853	Mtif3	1.04	45	6.5	70	6.77	
5854	Trps1	1.04	53	2.21	72	2.31	
5855	Diexf	1.04	75	6.8	116	7.08	
5856	RGD1306954	1.04	47	8.4	52	8.75	
5857	Trim27	1.04	162	24.41	218	25.41	
5858	Msl1	1.04	205	20.74	294	21.59	
5859	Ttc7b	1.04	282	24.43	460	25.43	
5860	Tmem87b	1.04	151	9.41	218	9.79	
5861	AABR07035107.1	1.04	43	11.94	48	12.42	
5862	Gtf2e2	1.04	72	11.07	101	11.51	
5863	Zfp287	1.04	25	3.64	36	3.78	
5864	Cul2	1.04	139	8.38	191	8.71	
5865	St6galnac4	1.04	105	10.62	135	11.04	
5866	Cic	1.04	287	18.61	405	19.35	
5867	Fam91a1	1.04	312	18.57	415	19.31	
5868	Nars	1.04	200	26.66	281	27.71	
5869	Marveld1	1.04	174	22.07	240	22.95	
5870	Tpp1	1.04	365	52.18	513	54.25	
5871	Hspa13	1.04	190	16.16	266	16.79	
5872	Dync1h1	1.04	1954	49.23	2584	51.17	
5873	Amdhd2	1.04	55	10.08	76	10.48	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5874	Dcun1d4	1.04	89	5.01	121	5.2	
5875	Ythdf1	1.04	265	27.75	377	28.84	
5876	Dvl3	1.04	352	26.17	490	27.18	
5877	Atg2a	1.04	196	10.57	265	10.97	
5878	Ahsa1	1.04	127	32.8	186	34.06	
5879	Gstm4	1.04	54	7.47	65	7.76	
5880	Gtf2h3	1.04	46	6.19	61	6.42	
5881	Lztf11	1.04	22	4.54	28	4.72	
5882	Atg12	1.04	191	25.4	270	26.37	
5883	Coil	1.04	36	2.5	50	2.6	
5884	Gtf2h4	1.04	38	6.79	53	7.05	
5885	Sugp1	1.04	121	12.56	171	13.04	
5886	Smarca5	1.04	120	14.77	183	15.33	
5887	Zwint	1.04	343	60.11	489	62.39	
5888	Hdac2	1.04	303	46.71	444	48.47	
5889	Phldb2	1.04	243	15.17	339	15.75	
5890	Pole	1.04	65	2.5	81	2.59	
5891	Taf5l	1.04	83	12.75	125	13.23	
5892	Zc3h7b	1.04	574	33.92	795	35.19	
5893	Kctd5	1.04	91	11.71	125	12.15	
5894	Zkscan3	1.04	140	13.72	215	14.23	
5895	AABR07044089.1	1.04	44	16.78	61	17.4	
5896	Ccp110	1.04	77	4.6	102	4.77	
5897	Ppp1r21	1.04	80	7.2	118	7.47	
5898	Cox19	1.04	92	8.48	143	8.79	
5899	Btbd10	1.04	115	11.07	154	11.48	
5900	Ccnd3	1.04	78	14.21	100	14.73	
5901	LOC499235	1.04	137	16.16	194	16.75	
5902	Malt1	1.04	51	3.23	80	3.35	
5903	Mrpl52	1.04	112	27.3	154	28.3	
5904	Pex19_1	1.04	45	22.11	73	22.91	
5905	Eif4b	1.04	732	59.94	1022	62.12	
5906	Dync1li2	1.04	336	22.04	474	22.84	
5907	Gtf3c1	1.04	748	34.91	1051	36.18	
5908	Zbtb9	1.04	57	7.41	78	7.67	
5909	Ywhab	1.04	544	72.52	761	75.14	
5910	Atp11a	1.04	282	14.03	389	14.54	
5911	Capn7	1.04	122	11.16	185	11.56	
5912	Wsb1	1.04	820	66.91	1050	69.29	
5913	Nmt1	1.04	288	39.26	421	40.65	
5914	AABR07004894.1	1.04	1	8.13	2	8.42	
5915	Ccne2	1.04	44	3.11	65	3.22	
5916	Fancl	1.04	26	2.85	39	2.95	
5917	LOC102549726	1.04	13	3.09	15	3.2	
5918	LOC688708	1.04	150	13.33	306	13.8	
5919	Luc7l	1.04	195	19.44	265	20.12	
5920	MacroD1	1.04	41	3.63	47	3.75	
5921	Med31	1.04	23	4.61	33	4.77	
5922	Prdx5	1.04	40	17.3	59	17.91	
5923	Uqcc3	1.04	31	13.64	36	14.12	
5924	Wrnip1	1.04	57	7.21	100	7.47	
5925	Cyp4f17	1.04	41	1.92	41	1.99	
5926	Fancd2	1.04	56	3.24	70	3.35	
5927	Nt5e	1.04	78	1.5	79	1.55	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5928	Pdcd5	1.04	0	7.16	0	7.42	
5929	Zfpm1	1.04	49	3.05	52	3.16	
5930	Lig1	1.03	15	17.91	41	18.53	
5931	Cops3	1.03	183	30.94	262	32.01	
5932	Ctbp2	1.03	134	11.83	202	12.24	
5933	Ss18	1.03	321	29.05	462	30.06	
5934	Aff2	1.03	676	21.55	946	22.3	
5935	Chmp5	1.03	101	23.59	155	24.4	
5936	Alg9	1.03	96	10.18	142	10.53	
5937	Coasy	1.03	100	13.03	117	13.47	
5938	Vps26b	1.03	227	22.17	322	22.94	
5939	Srbd1	1.03	88	4.98	119	5.15	
5940	Usp31	1.03	55	3.22	76	3.33	
5941	Erlin1	1.03	166	18.75	235	19.38	
5942	Vps29	1.03	111	20.35	139	21.04	
5943	Nfe2l1	1.03	1475	114.84	2227	118.69	
5944	Ebag9	1.03	44	6.4	64	6.62	
5945	Hif1an	1.03	36	9.2	58	9.51	
5946	Pacsin3	1.03	39	6.82	54	7.04	
5947	Pigh	1.03	45	5.19	74	5.37	
5948	Pdxdc1	1.03	204	7.45	318	7.69	
5949	Cdk8	1.03	66	11.01	103	11.38	
5950	Cldn12	1.03	57	5.72	80	5.91	
5951	Ube2e1	1.03	85	26.17	129	27.03	
5952	Pbdc1	1.03	56	12.22	79	12.63	
5953	Kbtbd2	1.03	217	19.61	303	20.26	
5954	Atxn1	1.03	165	5.3	231	5.47	
5955	Zdhhc6	1.03	115	17.89	160	18.47	
5956	Palb2	1.03	37	2.06	46	2.12	
5957	Wbp2	1.03	125	51.59	170	53.25	
5958	Nsa2	1.03	137	41.64	150	42.97	
5959	Phf2	1.03	311	18.97	433	19.57	
5960	Sap30bp	1.03	106	9.03	147	9.32	
5961	Thumpd1	1.03	80	12.62	110	13.02	
5962	Elmsan1	1.03	167	6.79	215	7.01	
5963	Abcb7	1.03	43	4.41	57	4.55	
5964	B3gat3	1.03	98	20.01	132	20.64	
5965	Blm	1.03	48	2.35	57	2.42	
5966	Fbxl4	1.03	55	3.22	82	3.33	
5967	Kdm1a	1.03	280	27.45	369	28.31	
5968	Phospho2	1.03	41	4.99	52	5.15	
5969	Slc16a2	1.03	137	12.92	192	13.32	
5970	Pip5k1a	1.03	273	22	362	22.68	
5971	Heca	1.03	99	7.17	144	7.4	
5972	Prr14l	1.03	261	7.77	370	8.01	
5973	Serbp1	1.03	251	56.65	345	58.39	
5974	5S_rRNA_260	1.03	5	112.58	8	116.01	
5975	Rnf41	1.03	311	34.66	465	35.72	
5976	Adpgk	1.03	248	28.22	348	29.07	
5977	Mxd4	1.03	326	25.96	465	26.74	
5978	Cope	1.03	200	56.38	265	58.07	
5979	Gpatch2l	1.03	79	5.43	88	5.59	
5980	lscu	1.03	56	17.63	80	18.16	
5981	Dsc2	1.03	99	7.78	136	8.01	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
5982	Zyg11b	1.03	102	10.44	133	10.74	
5983	Bin1	1.03	164	12.17	187	12.53	
5984	Srpk1	1.03	175	20.05	237	20.63	
5985	Chst11	1.03	651	54.93	870	56.52	
5986	Rnf44	1.03	288	23.48	401	24.16	
5987	Gpcpd1	1.03	232	15.9	305	16.35	
5988	Raf1	1.03	464	45.41	659	46.71	
5989	Asah2	1.03	19	1.15	24	1.18	
5990	Ccdc51	1.03	32	3.14	36	3.22	
5991	LOC687609	1.03	22	1.14	31	1.18	
5992	Syt13	1.03	10	0.84	12	0.86	
5993	Atm	1.03	359	4.46	547	4.58	
5994	Bach1	1.03	35	5.62	57	5.78	
5995	Dapp1	1.03	10	0.95	13	0.97	
5996	Dbndd2	1.03	8	2.49	11	2.56	
5997	Dffa	1.03	61	5.21	84	5.36	
5998	Dus4l	1.03	16	1.07	13	1.1	
5999	Fkbp15	1.03	107	7.96	150	8.18	
6000	Gmfg	1.03	11	5.11	17	5.25	
6001	Hint3	1.03	27	5.37	38	5.52	
6002	Itgb3	1.03	18	1.21	23	1.25	
6003	Med17	1.03	69	10.01	95	10.29	
6004	Mettl23	1.03	26	6.42	26	6.59	
6005	Nnmt	1.03	18	2.7	23	2.78	
6006	Pigp	1.03	19	3.88	21	3.99	
6007	Ptgs2	1.03	8	0.66	11	0.68	
6008	Rpl35a_2	1.03	0	8.7	0	8.94	
6009	Tmem161b	1.03	44	3.97	62	4.08	
6010	Zfp956	1.03	32	3.62	40	3.72	
6011	Zkscan5	1.03	95	7.25	133	7.45	
6012	Galk2	1.03	111	11.36	169	11.66	
6013	Zfp217	1.03	79	7.34	111	7.53	
6014	Polr3e	1.03	84	8.07	116	8.28	
6015	Uqcc1	1.03	115	10.01	157	10.27	
6016	Ctdspl2	1.03	154	10.55	221	10.83	
6017	Atp6v0b	1.03	136	45.39	185	46.6	
6018	Eif3i	1.03	167	64.34	243	66.04	
6019	Cir1	1.03	71	11.92	115	12.24	
6020	Senp1	1.03	56	11.01	69	11.3	
6021	Eif3g	1.03	177	55.33	245	56.78	
6022	Fzd3	1.03	74	6.72	92	6.9	
6023	Atf1	1.03	160	15.44	221	15.84	
6024	Bmpr1b	1.03	566	96.28	819	98.78	
6025	Ttyh3	1.03	483	34.69	672	35.58	
6026	LOC100363782	1.03	227	42.15	322	43.23	
6027	RGD1562310	1.03	72	6.12	96	6.27	
6028	Fer	1.03	98	3.47	129	3.56	
6029	Ctsa	1.03	785	124.63	1067	127.82	
6030	Capza2	1.03	213	30.03	308	30.8	
6031	Marcks	1.03	575	49.89	787	51.16	
6032	Inpp5k	1.03	84	16.16	122	16.57	
6033	Srsf6	1.03	459	42.46	652	43.54	
6034	Srrm2	1.03	3413	146.41	4671	150.1	
6035	Cdc42ep4	1.02	72	7.93	93	8.13	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6036	Mink1	1.02	217	13.33	311	13.66	
6037	Siah1	1.02	90	10.77	129	11.04	
6038	Tmcc1	1.02	152	11.2	226	11.48	
6039	Tubgcp3	1.02	142	12.26	204	12.57	
6040	Rtf1	1.02	245	17.16	353	17.58	
6041	Ercc6	1.02	136	4.26	192	4.37	
6042	Nipa2	1.02	117	11.27	179	11.55	
6043	Jup	1.02	621	49.74	867	50.97	
6044	Mcph1	1.02	100	5.96	141	6.11	
6045	Taf4b	1.02	41	2.47	50	2.53	
6046	Xkr8	1.02	28	3.69	39	3.78	
6047	Dmwd	1.02	60	8.41	80	8.62	
6048	Trim33	1.02	219	16.23	289	16.63	
6049	Usf2	1.02	174	22.09	216	22.63	
6050	Zfp827	1.02	167	11.32	228	11.6	
6051	Slmap	1.02	343	16.48	452	16.88	
6052	Tdg	1.02	259	22.53	348	23.07	
6053	Slu7	1.02	172	26.01	245	26.63	
6054	Gfpt1	1.02	359	19.26	503	19.72	
6055	Nsun4_1	1.02	13	6.5	17	6.65	
6056	Ap4b1	1.02	53	5.7	71	5.84	
6057	Pstk	1.02	80	5.49	117	5.62	
6058	Chd8	1.02	587	23.25	816	23.8	
6059	Lrig2	1.02	83	5.11	124	5.23	
6060	LOC100364912	1.02	66	11.01	93	11.27	
6061	Trip11	1.02	198	7.29	269	7.46	
6062	Abcg3l1	1.02	74	4.77	99	4.88	
6063	Cep57l1	1.02	40	2.95	66	3.02	
6064	RGD1311703	1.02	197	42.06	288	43.03	
6065	Zw10	1.02	66	7.82	90	8	
6066	AABR07009106.2	1.02	17	3.37	25	3.45	
6067	Amacr	1.02	30	3.97	37	4.07	
6068	Cdyl	1.02	86	6.3	142	6.45	
6069	Msh6	1.02	181	14.1	258	14.43	
6070	Rbm5	1.02	487	32.99	694	33.76	
6071	Trmt10b	1.02	45	5.29	44	5.41	
6072	Gorasp2_1	1.02	11	27.48	21	28.1	
6073	Rpl11	1.02	415	42.47	571	43.44	
6074	Flot2	1.02	266	28.16	390	28.8	
6075	LOC100910568	1.02	152	2.86	230	2.93	
6076	Tsc22d3_1	1.02	106	19.81	145	20.26	
6077	Dgkz	1.02	96	8.52	133	8.71	
6078	Wdr36	1.02	100	11.55	150	11.81	
6079	Zfp746	1.02	114	8.53	179	8.73	
6080	Suz12	1.02	92	11.08	141	11.32	
6081	St5	1.02	352	21.34	539	21.82	
6082	Usf1	1.02	126	25.19	175	25.75	
6083	Ap5m1	1.02	77	5.92	97	6.05	
6084	Cyth1	1.02	102	5.72	147	5.85	
6085	Prickle2	1.02	134	4.62	172	4.72	
6086	Sh2b3	1.02	90	4.11	153	4.2	
6087	Pnpt1	1.02	160	13.47	214	13.77	
6088	Pnrc1	1.02	198	44.75	274	45.73	
6089	Atp10d	1.02	301	21.28	437	21.74	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6090	Hira	1.02	21	14.46	26	14.77	
6091	Armcx6	1.02	30	5.63	42	5.75	
6092	Ehbp111	1.02	44	2.11	47	2.16	
6093	Rpo1-3	1.02	126	11.43	206	11.68	
6094	Mmp11	1.02	1028	233.77	1425	238.78	
6095	Dnaaf5	1.02	87	7.46	113	7.62	
6096	Tomm22	1.02	142	49.92	196	50.98	
6097	Mapk9	1.02	261	17.56	338	17.93	
6098	Arcn1	1.02	577	58.19	799	59.42	
6099	Fam195b	1.02	86	25.88	112	26.43	
6100	Rpl36al_2	1.02	14	28.14	9	28.73	
6101	Tm9sf3	1.02	395	63.76	537	65.09	
6102	Eif1	1.02	434	150.78	577	153.87	
6103	AABR07054405.1	1.02	271	26.26	434	26.79	
6104	Plagl2	1.02	75	4.91	105	5.01	
6105	Tead2	1.02	253	38.45	372	39.23	
6106	Mark3	1.02	356	22.58	542	23.04	
6107	Pi4kb	1.02	372	26.31	510	26.84	
6108	Sucla2	1.02	326	50.36	490	51.37	
6109	Lig3	1.02	187	11.64	282	11.87	
6110	Kdm3a	1.02	226	15.99	311	16.31	
6111	Fam110a	1.02	30	3.46	40	3.52	
6112	Gpr161	1.02	21	1.87	34	1.91	
6113	Mboat1	1.02	62	4.19	84	4.27	
6114	Mob1b	1.02	110	11.78	161	12.01	
6115	Pwwp2b	1.02	20	1.78	27	1.82	
6116	Sec22b	1.02	143	31.07	197	31.68	
6117	SNORD27	1.02	11	53.82	15	54.87	
6118	Tmem209	1.02	106	10.88	115	11.09	
6119	Usp45	1.02	128	5.2	161	5.3	
6120	Vamp5	1.02	26	26.03	32	26.54	
6121	Wrn	1.02	127	6.04	177	6.15	
6122	Zfp12	1.02	33	5.43	45	5.54	
6123	Arpp19	1.02	38	23.5	56	23.96	
6124	Lcorl	1.02	134	4.01	218	4.09	
6125	Nubpl	1.02	37	2.11	58	2.15	
6126	Rab27a	1.02	16	1.49	21	1.52	
6127	Shisa2	1.02	11	4.15	15	4.23	
6128	Zfp512	1.02	133	10.68	203	10.89	
6129	Nfatc3	1.02	360	18.4	470	18.75	
6130	Gga1	1.02	138	16.39	188	16.7	
6131	Birc6	1.02	584	15.87	827	16.17	
6132	Amd1	1.02	193	19.87	264	20.24	
6133	Slc25a17	1.02	144	12	191	12.22	
6134	Pygb	1.02	431	23.4	630	23.83	
6135	Oxct1	1.02	238	22.83	309	23.24	
6136	Mef2a	1.02	129	10.02	219	10.2	
6137	Tgfb1_1	1.02	274	21.85	361	22.24	
6138	Cpsf7	1.02	312	30.11	414	30.65	
6139	Gpr107	1.02	204	15.22	284	15.49	
6140	Prrc1	1.02	99	18.32	127	18.65	
6141	Slc35a3	1.02	93	15.61	123	15.89	
6142	Stx18	1.02	97	8.74	104	8.89	
6143	Hectd3	1.02	40	5.04	56	5.13	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6144	Arfgap1	1.02	156	23.41	218	23.81	
6145	Zcchc2	1.02	103	4.09	141	4.16	
6146	Tmsb10_1	1.02	473	363.85	640	370.09	
6147	Ccny	1.02	186	33.82	253	34.39	
6148	Fam120b	1.02	184	9.96	264	10.12	
6149	Cdkal1	1.02	146	5.35	181	5.44	
6150	Clk4	1.02	104	13.03	184	13.25	
6151	Clspn	1.02	15	1.79	25	1.82	
6152	Mccc1	1.02	28	3.67	36	3.73	
6153	Plekhf2	1.02	54	6.35	79	6.46	
6154	Rab5a	1.02	40	17.3	84	17.59	
6155	Stk3	1.02	141	9.88	261	10.04	
6156	Phax	1.02	63	11.66	81	11.86	
6157	Tnpo3	1.02	323	25.25	441	25.67	
6158	C2cd3	1.02	154	6.48	223	6.59	
6159	Trmt1l	1.02	111	8.4	181	8.54	
6160	Nradd	1.02	85	23.51	120	23.89	
6161	Tmem18	1.02	106	10.61	139	10.78	
6162	Naa50	1.02	20	4.02	32	4.08	
6163	Atp6ap2	1.02	129	19.92	171	20.23	
6164	Slc25a36l1	1.02	273	31.33	371	31.81	
6165	Tmx4	1.02	410	29.64	571	30.09	
6166	Mxi1	1.02	117	11.68	183	11.85	
6167	Tnks	1.02	338	17.25	505	17.51	
6168	Fam171b	1.01	237	30.72	326	31.17	
6169	Htt	1.01	300	6.84	427	6.94	
6170	Bag2	1.01	35	6.52	55	6.62	
6171	Glyctk	1.01	16	2.57	20	2.6	
6172	Ly9	1.01	18	2.58	26	2.61	
6173	Mog	1.01	26	3.21	80	3.26	
6174	Mpped2	1.01	100	6.48	210	6.58	
6175	Nnat	1.01	59	12.07	76	12.25	
6176	Polk	1.01	25	1.33	29	1.35	
6177	Rpf1	1.01	66	10.9	88	11.06	
6178	Rslcan18	1.01	28	4.25	38	4.31	
6179	Smg5	1.01	286	20.73	381	21.04	
6180	Vmp1	1.01	150	18	222	18.27	
6181	Wdr54	1.01	5	1.16	7	1.18	
6182	Insr	1.01	412	17.61	565	17.87	
6183	Rab7a	1.01	389	68.01	529	68.97	
6184	Trip12	1.01	1121	48.71	1511	49.39	
6185	Bri3	1.01	88	35.53	139	36.02	
6186	Ensa	1.01	162	17.67	212	17.91	
6187	Kdm4c	1.01	116	6.4	179	6.49	
6188	Klh7	1.01	205	15.81	258	16.03	
6189	Gramd3	1.01	88	7.78	128	7.89	
6190	Sertad1	1.01	60	18.31	86	18.56	
6191	Tsg101	1.01	265	51.48	362	52.18	
6192	Txndc17	1.01	49	11.43	63	11.59	
6193	Rptor	1.01	246	8.97	330	9.09	
6194	Gcc1	1.01	76	7.79	103	7.89	
6195	Efemp1	1.01	81	13.34	119	13.52	
6196	Pde8a	1.01	558	53.74	901	54.46	
6197	Wdr7	1.01	273	10.98	377	11.12	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6198	lars2	1.01	197	19.5	288	19.75	
6199	Cyfip1	1.01	537	38.73	780	39.23	
6200	Ddrgk1	1.01	33	7.14	48	7.23	
6201	Lcat	1.01	41	8.24	52	8.35	
6202	Rhobtb2	1.01	31	2.14	50	2.17	
6203	Ccdc47	1.01	323	27.56	461	27.92	
6204	Osbpl6	1.01	118	4.34	159	4.4	
6205	Pdcd4	1.01	275	37.43	374	37.91	
6206	Reps1	1.01	128	15.79	174	16	
6207	Psmc6	1.01	166	38.31	224	38.78	
6208	Ergic1	1.01	428	50.58	604	51.2	
6209	Matr3	1.01	196	26.65	301	26.98	
6210	Atpaf1	1.01	77	5.5	107	5.57	
6211	Hipk1	1.01	702	30.2	962	30.57	
6212	LOC103689992	1.01	197	67.95	188	68.77	
6213	Crip2	1.01	80	25.73	112	26.04	
6214	Ehd2	1.01	245	41.44	342	41.93	
6215	Atad1	1.01	197	15.09	290	15.27	
6216	Ptp4a2	1.01	209	59.86	293	60.56	
6217	Bsdc1	1.01	260	29.86	360	30.2	
6218	Josd2	1.01	23	7.24	34	7.32	
6219	Mgst1	1.01	333	116.62	459	117.96	
6220	Shisa4	1.01	22	10.36	40	10.48	
6221	Strbp	1.01	114	9.41	173	9.52	
6222	Tex30	1.01	30	3.16	48	3.19	
6223	Vps36	1.01	47	8.84	66	8.94	
6224	Stxbp5	1.01	184	4.56	242	4.61	
6225	Bcat1	1.01	573	63.62	794	64.31	
6226	Aldh18a1	1.01	0	5.63	0	5.69	
6227	Bace2	1.01	310	40.73	390	41.16	
6228	Anp32b	1.01	352	87.7	486	88.63	
6229	Wdtdc1	1.01	232	18.55	327	18.75	
6230	LOC100910957	1.01	38	6.75	61	6.81	
6231	Shprh	1.01	198	7.66	284	7.74	
6232	Coro1b	1.01	382	74.36	532	75.12	
6233	Tmem63b	1.01	195	20.42	277	20.62	
6234	Acap2	1.01	211	13.72	289	13.85	
6235	Hccs	1.01	40	6.04	55	6.1	
6236	Mrpl13	1.01	82	25.89	112	26.13	
6237	Nkiras1	1.01	21	3.21	30	3.24	
6238	Ppm1h	1.01	60	1.5	71	1.51	
6239	Rmdn3	1.01	10	3.29	12	3.33	
6240	Ago3	1.01	49	2.31	65	2.33	
6241	Dnaja3	1.01	125	17.51	164	17.67	
6242	Inip	1.01	47	10.16	57	10.25	
6243	Mphosph9	1.01	53	2.11	79	2.13	
6244	Obfc1	1.01	76	9.01	109	9.09	
6245	Phc2	1.01	316	23.32	458	23.53	
6246	LOC100911372	1.01	31	301.26	19	304.01	
6247	Tpra1	1.01	169	26.7	235	26.94	
6248	Ppp1r9a	1.01	219	5.95	261	6	
6249	Zfp518b	1.01	63	6.28	85	6.34	
6250	Nub1	1.01	152	25.4	211	25.61	
6251	Sdha	1.01	338	47.86	469	48.27	

Supplemental Table 3  
FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6252	Serinc1	1.01	489	106.46	682	107.33	
6253	Grpel2	1.01	98	7.2	146	7.26	
6254	Crnk1l1_1	1.01	20	13.85	34	13.97	
6255	Slc38a10	1.01	312	25.72	414	25.92	
6256	Hba2	1.01	1074	1043.3	1226	1051.7	
6257	Gpd1l	1.01	94	8.68	128	8.75	
6258	Camlg	1.01	81	11.94	118	12.03	
6259	Cdk5rap3	1.01	73	12.92	106	13.02	
6260	Eno2	1.01	0	3.72	0	3.74	
6261	Limk1	1.01	56	5.02	77	5.06	
6262	Emg1	1.01	111	9.71	169	9.77	
6263	Atf2	1.01	144	19.15	196	19.28	
6264	Plxnb2	1.01	1636	90.23	2215	90.84	
6265	Zscan26	1.01	224	15.41	306	15.52	
6266	Hid1	1.01	107	10.54	140	10.61	
6267	Eif3b	1.01	406	48.38	551	48.69	
6268	Fxyd6	1.01	55	10.66	73	10.73	
6269	Mppe1	1.01	75	8.18	109	8.23	
6270	Mrps11	1.01	65	10.55	76	10.62	
6271	Nifk	1.01	53	12.85	76	12.93	
6272	Sh3d19	1.01	57	7.94	87	8	
6273	Zc3hc1	1.01	70	10.32	95	10.39	
6274	Csnk2a2	1.01	222	26.24	328	26.39	
6275	Gpatch4	1.01	108	10.63	117	10.69	
6276	Pkn2	1.01	404	19.77	568	19.88	
6277	Sqstm1	1.01	707	106.1	1020	106.7	
6278	Slc39a1	1.01	484	72.68	661	73.09	
6279	Papola	1.01	501	31.75	708	31.92	
6280	Irak4	1.01	42	2.63	49	2.64	
6281	Nipa1	1.01	50	5.71	72	5.74	
6282	Psmc3	1.01	211	45.2	284	45.45	
6283	Foxn3	1.01	247	11.37	392	11.42	
6284	Cmtm6	1.01	219	23.59	296	23.71	
6285	Pold1	1.01	67	5.33	88	5.36	
6286	Ankrd40	1	204	20.56	289	20.65	
6287	ldh3B	1	136	30.77	186	30.92	
6288	Taf11	1	46	9.75	62	9.8	
6289	LOC100910429	1	153	8.98	195	9.02	
6290	Celf1	1	353	48.02	540	48.23	
6291	Tstd2	1	77	7.2	120	7.23	
6292	Oat	1	107	17.19	146	17.26	
6293	Rassf8	1	117	7.05	171	7.08	
6294	Zfp358	1	137	24.42	186	24.52	
6295	Dis3l	1	85	7.75	114	7.78	
6296	Gstcd	1	46	2.68	67	2.69	
6297	Fam134c	1	208	21.28	292	21.36	
6298	Xpo7	1	465	30.94	679	31.04	
6299	Akr1cl	1	47	10.37	75	10.4	
6300	Dapk1	1	287	14.6	394	14.64	
6301	Gtf3c4	1	206	10.78	287	10.81	
6302	AABR07058985.2	1	35	4.85	47	4.87	
6303	Etfdh	1	110	13.82	163	13.86	
6304	Smc6	1	165	10.06	237	10.08	
6305	Senp6	1	473	27.75	670	27.82	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6306	Eri3	1	377	47.13	455	47.25	
6307	Rnf40	1	36	4.66	42	4.67	
6308	Echdc1	1	55	8.55	82	8.57	
6309	Enoph1	1	61	9.44	86	9.47	
6310	Hdgfrp2	1	163	20.62	228	20.67	
6311	Dnaja1	1	345	79.84	519	80.03	
6312	Prrc2b	1	766	37.38	1028	37.46	
6313	Cr1l	1	261	36.84	380	36.92	
6314	Abt1	1	42	13.18	58	13.21	
6315	Fam219b	1	112	11.67	140	11.7	
6316	Pnp	1	637	196.48	867	196.89	
6317	Pom121	1	254	16.05	346	16.08	
6318	Pcif1	1	168	13.66	228	13.68	
6319	Rest	1	255	21.35	358	21.39	
6320	Topbp1	1	126	8.35	165	8.37	
6321	Zfp668	1	70	5.37	84	5.38	
6322	Casp3	1	65	7.8	80	7.81	
6323	Tmed7	1	326	34.15	440	34.2	
6324	Vps9d1	1	109	7.51	124	7.52	
6325	Smg6	1	217	6.16	334	6.16	
6326	Lman1	1	290	45.55	390	45.6	
6327	Ccdc132	1	100	12.09	149	12.1	
6328	Tnrc6c	1	153	7.37	202	7.38	
6329	Rfx5	1	128	10.49	174	10.5	
6330	Gnai1	1	96	16.17	131	16.19	
6331	Abhd17b	1	89	9.52	140	9.52	
6332	Rasl11a	1	69	18.46	98	18.47	
6333	Eps15l1	1	320	15.04	428	15.05	
6334	Sf3a1	1	282	19.19	390	19.2	
6335	LOC100912182	1	61	49.94	87	49.97	
6336	Ubqln1	1	451	40.46	615	40.48	
6337	Zcchc11	1	825	51.65	1207	51.68	
6338	Alkbh5	1	250	16.38	332	16.39	
6339	Noc2l	1	164	21.98	227	21.98	
6340	Parn	-1	118	8.36	173	8.36	
6341	Mapkbp1	-1	277	12.76	347	12.75	
6342	Rdh11	-1	97	16.07	135	16.06	
6343	Asb8	-1	127	15.31	166	15.3	
6344	Gab1	-1	152	14.88	252	14.88	
6345	Hnrnpul1	-1	772	69.4	1046	69.37	
6346	Herpud2	-1	123	16.71	192	16.7	
6347	Ubxn1	-1	198	64.59	264	64.56	
6348	Zfp62	-1	96	11.27	131	11.26	
6349	Ankzf1	-1	142	15.35	208	15.33	
6350	Ak2	-1	190	25.57	267	25.54	
6351	Fyn	-1	235	13.74	327	13.72	
6352	Prkag1	-1	1346	23.15	1831	23.11	
6353	Dot1l	-1	238	10.23	318	10.22	
6354	Snrpb	-1	349	74.13	465	74	
6355	LOC684988	-1	292	299.76	377	299.16	
6356	Eprs	-1	564	36.99	743	36.91	
6357	Sec24d	-1	302	27.33	398	27.27	
6358	AABR07054554.1	-1	3	0.97	4	0.97	
6359	Cdkl2	-1	19	1.2	29	1.19	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6360	Dhdh	-1	54	6.5	64	6.48	
6361	Dtd1	-1	66	11.78	101	11.74	
6362	Gba2	-1	104	9.35	144	9.32	
6363	Gps2	-1	65	16.03	91	15.98	
6364	Kat8	-1	85	12.97	159	12.93	
6365	Kcnc2	-1	27	0.59	35	0.59	
6366	Kcnh1	-1	14	0.22	15	0.22	
6367	LOC100174910	-1	35	3.02	53	3.01	
6368	Nsun4_2	-1	0	0.71	0	0.7	
6369	Pik3cg	-1	4	0.17	8	0.17	
6370	Pogz	-1	455	21.18	623	21.12	
6371	Rad54b	-1	57	1.32	80	1.32	
6372	Rit1	-1	117	25.35	228	25.27	
6373	Rpe	-1	48	4.56	64	4.55	
6374	AABR07008066.3	-1	4	1.01	4	1	
6375	AABR07026893.1	-1	7	16.71	8	16.66	
6376	AABR07028795.2	-1	13	1.84	20	1.83	
6377	AABR07044935.1	-1	0	0.6	0	0.6	
6378	AABR07072539.3	-1	0	1.27	0	1.27	
6379	Abca4	-1	15	0.3	19	0.3	
6380	AC126148.2	-1	5	4.26	12	4.25	
6381	Acss3	-1	193	9.68	267	9.65	
6382	Acyp2	-1	16	0.95	20	0.95	
6383	Adamtsl4	-1	7	0.52	14	0.52	
6384	Adar	-1	137	9.03	187	9	
6385	Akap8	-1	189	14.89	251	14.84	
6386	Alk	-1	163	4.09	296	4.08	
6387	Ap4s1	-1	33	1.91	37	1.9	
6388	Apcdd1	-1	311	35.31	421	35.2	
6389	Arhgef7	-1	211	11.84	266	11.81	
6390	Casz1	-1	43	1.8	56	1.8	
6391	Ccdc176	-1	21	0.49	47	0.49	
6392	Cd46	-1	11	0.91	25	0.91	
6393	Cenpl	-1	21	3.45	35	3.44	
6394	Cep104	-1	156	10.43	205	10.4	
6395	Cep83	-1	34	2.83	39	2.82	
6396	Csgalnact1	-1	12	0.67	14	0.66	
6397	Dbf4_1	-1	3	1.73	4	1.72	
6398	Dcp2_2	-1	0	0.76	0	0.76	
6399	Dnajb9	-1	66	12.41	89	12.37	
6400	Doc2b	-1	9	0.88	5	0.88	
6401	Doc2g	-1	4	0.74	4	0.74	
6402	Erp29	-1	135	24.73	180	24.65	
6403	Fam186a	-1	13	0.2	12	0.2	
6404	Fam76b	-1	117	6.7	169	6.68	
6405	Fam98c	-1	23	4.28	37	4.27	
6406	Faxc	-1	6	0.65	14	0.64	
6407	Fbxo24	-1	13	0.52	13	0.52	
6408	Fig4	-1	113	7.48	145	7.45	
6409	Flad1	-1	66	6.84	88	6.82	
6410	Gpr155	-1	7	0.44	16	0.44	
6411	Gpr157	-1	3	0.46	5	0.46	
6412	Gramd2	-1	7	0.77	5	0.77	
6413	Gtf2b	-1	82	20.03	104	19.97	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6414	Hapln2	-1	4	0.78	12	0.78	
6415	Hcfc1	-1	852	32.63	1124	32.53	
6416	Hmgn5b	-1	1	0.53	0	0.53	
6417	Khk	-1	11	0.76	15	0.76	
6418	Klhl32	-1	37	1.36	47	1.36	
6419	LOC100912928	-1	0	2.19	0	2.19	
6420	LOC102553866	-1	18	1.82	23	1.81	
6421	Mamdc4	-1	10	0.28	11	0.28	
6422	Map3k13	-1	51	0.39	118	0.39	
6423	Mmp16	-1	13	0.62	9	0.61	
6424	Mpp6	-1	58	4.53	87	4.51	
6425	Naa38	-1	23	12.22	21	12.18	
6426	Naprt1	-1	25	3.79	30	3.78	
6427	Ndufaf6	-1	28	3.98	38	3.97	
6428	Ndufb9	-1	93	46.29	128	46.14	
6429	Nrg2	-1	23	0.34	30	0.34	
6430	Nt5dc3	-1	27	3.38	37	3.37	
6431	Nup37	-1	31	3.04	59	3.03	
6432	Olfml2b	-1	95	10.44	126	10.4	
6433	Osbpl10	-1	21	1.2	34	1.2	
6434	Pcsk9	-1	5	0.33	4	0.32	
6435	Phf6_2	-1	98	10.93	134	10.9	
6436	Ppic	-1	51	12.04	89	12	
6437	Ptger2	-1	14	2.22	18	2.21	
6438	Ptger3	-1	8	0.53	13	0.53	
6439	Pus10	-1	140	4.45	198	4.44	
6440	Rap1gap	-1	6	0.33	4	0.33	
6441	Rbl2	-1	213	12.74	320	12.7	
6442	Rfc2	-1	45	8.54	52	8.51	
6443	RGD1307704	-1	0	0.42	0	0.42	
6444	RGD1311745	-1	12	4.62	18	4.61	
6445	RGD1564719	-1	14	2.39	19	2.38	
6446	Rnf182	-1	12	1.78	19	1.78	
6447	Sdpr	-1	86	9.88	122	9.85	
6448	Sf3b2	-1	512	56.26	680	56.09	
6449	Slc37a1	-1	5	0.37	6	0.37	
6450	Smim12	-1	21	7.75	30	7.73	
6451	SNORD12_2	-1	0	24.41	0	24.33	
6452	SNORD14_3	-1	0	25.26	0	25.18	
6453	SNORD65_1	-1	3	15.09	4	15.04	
6454	Sstr3	-1	7	0.56	8	0.56	
6455	Tlcd2	-1	4	0.51	4	0.51	
6456	Tlk1_2	-1	0	0.8	1	0.8	
6457	Tp53rk	-1	9	1.74	12	1.74	
6458	Trib1	-1	11	1.65	14	1.65	
6459	Trmt5	-1	39	4.27	55	4.26	
6460	Trub2	-1	74	14.26	94	14.21	
6461	Ube2q2l	-1	9	2.14	12	2.13	
6462	Wbp11_1	-1	2	19.43	3	19.36	
6463	Wfdc1	-1	4	0.86	4	0.86	
6464	Wif1	-1	4	0.48	7	0.48	
6465	Zbtb42	-1	15	3.19	20	3.18	
6466	Zfp74_1	-1	0	0.53	0	0.53	
6467	Zmym1	-1	30	1.98	42	1.97	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6468	Zmym6nb	-1	21	6.32	31	6.3	
6469	AABR07000550.1	-1	3	2.57	2	2.56	
6470	Cacng4	-1	12	0.55	18	0.55	
6471	Dlgap4	-1	371	20.61	501	20.55	
6472	Mfap5	-1	19	4.99	24	4.98	
6473	Rfx8	-1	14	0.61	16	0.6	
6474	Ube3d	-1	47	1.17	96	1.17	
6475	Hnrnp1	-1	838	129.25	1129	128.8	
6476	Sp1	-1	313	14.27	420	14.22	
6477	Yeats2	-1	339	15.75	421	15.68	
6478	Saraf	-1	238	43.99	313	43.8	
6479	Tshz1	-1	461	52.74	621	52.49	
6480	Dpagt1	-1	161	22.14	216	22.04	
6481	Sec16a	-1	601	22.77	787	22.66	
6482	Zhx3	-1.01	145	13.37	191	13.3	
6483	Man2b1	-1.01	427	41.9	566	41.68	
6484	Masp1	-1.01	6273	317.31	7998	315.65	
6485	Usp33	-1.01	374	22.51	553	22.39	
6486	Aldh7a1	-1.01	244	40.53	345	40.3	
6487	Mttr11	-1.01	130	13.75	161	13.67	
6488	Nans	-1.01	115	18.21	152	18.11	
6489	Pnpla8	-1.01	121	16	184	15.91	
6490	Smarce1	-1.01	391	39.15	564	38.93	
6491	Smtn	-1.01	104	11.28	146	11.21	
6492	Mdc1	-1.01	121	7.78	162	7.74	
6493	Tceb2	-1.01	92	61.47	112	61.12	
6494	Aars	-1.01	405	39.54	533	39.32	
6495	Vangl1	-1.01	114	6.58	155	6.54	
6496	Hnrnp11	-1.01	256	37.1	343	36.88	
6497	Adsl	-1.01	156	16.32	193	16.22	
6498	Ppp1r26	-1.01	84	9.79	112	9.74	
6499	Pcgf3	-1.01	155	21.34	241	21.21	
6500	Nudt3	-1.01	254	29.41	324	29.23	
6501	Rela	-1.01	244	34.24	325	34.02	
6502	Mapre2	-1.01	68	12.69	86	12.61	
6503	Zswim6	-1.01	90	11.36	131	11.29	
6504	LOC100911485	-1.01	102	20.67	135	20.54	
6505	Hras	-1.01	63	19.31	81	19.18	
6506	Cnm4	-1.01	76	5.42	101	5.39	
6507	Snx19	-1.01	229	13.8	302	13.71	
6508	Sort1	-1.01	389	18.94	516	18.81	
6509	Lix1l	-1.01	153	13.98	210	13.89	
6510	LOC100360638_2	-1.01	52	9.79	68	9.73	
6511	Trim3	-1.01	80	8.03	129	7.97	
6512	Cdk10	-1.01	81	10.07	120	10	
6513	ENSRNOG00000050	-1.01	164	10.5	227	10.43	
6514	Dctn6	-1.01	72	19.46	93	19.32	
6515	Golt1b	-1.01	125	14.21	179	14.1	
6516	Parp6	-1.01	179	15.68	267	15.56	
6517	Dusp6	-1.01	55	7.23	73	7.18	
6518	Eef1d	-1.01	184	29.62	248	29.39	
6519	Aplf	-1.01	1429	15.03	1898	14.92	
6520	Slc39a13	-1.01	52	7.81	75	7.75	
6521	Ubr1	-1.01	159	9.44	213	9.36	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6522	LOC103692716	-1.01	11	46.6	8	46.23	
6523	Skiv2l2	-1.01	195	15.11	265	14.98	
6524	Sil1	-1.01	95	10.9	116	10.81	
6525	Cdk17	-1.01	85	4.83	96	4.79	
6526	Kdelr3	-1.01	54	14.88	70	14.76	
6527	Eif4h	-1.01	562	71.87	768	71.28	
6528	Gnl3l	-1.01	204	15.25	278	15.12	
6529	Srpr	-1.01	395	54.56	515	54.09	
6530	Stxbp4	-1.01	86	6.79	102	6.73	
6531	Zfp68	-1.01	152	10.52	200	10.42	
6532	Gpkow	-1.01	96	7.98	130	7.91	
6533	Vps53	-1.01	209	17.03	297	16.88	
6534	Nedd8	-1.01	160	60.65	203	60.12	
6535	Zfp18	-1.01	52	9.32	79	9.23	
6536	Faf2	-1.01	257	18.05	359	17.89	
6537	Mrps14	-1.01	47	9.07	61	8.99	
6538	Fam193b	-1.01	273	14.01	426	13.88	
6539	Ola1	-1.01	107	17.85	140	17.68	
6540	Srsf11	-1.01	355	34.28	533	33.97	
6541	Zc3h3	-1.01	137	8.96	180	8.88	
6542	Mier1	-1.01	271	14.3	379	14.17	
6543	Kmt2b	-1.01	309	12.72	407	12.6	
6544	Zfp414	-1.01	45	12.93	57	12.81	
6545	Pxn	-1.01	144	11.36	177	11.25	
6546	Ttll4	-1.01	122	11.52	179	11.41	
6547	Ankrd27	-1.01	154	9.35	201	9.26	
6548	Zfp775	-1.01	66	3.46	112	3.43	
6549	Eml2	-1.01	150	14.25	204	14.11	
6550	Enpp4	-1.01	109	8.39	147	8.31	
6551	Ythdc1	-1.01	231	21.1	319	20.89	
6552	Nkd1	-1.01	157	14.45	207	14.3	
6553	Sart1	-1.01	138	18.23	186	18.04	
6554	Stx4	-1.01	114	31.86	156	31.53	
6555	Zfp131	-1.01	122	15.24	181	15.08	
6556	Ano6	-1.01	486	24.21	659	23.95	
6557	Cpsf1	-1.01	231	17.12	299	16.93	
6558	Ywhae	-1.01	1175	227.91	1573	225.37	
6559	Commd6	-1.01	56	12.35	71	12.21	
6560	LOC691170	-1.01	38	4.82	57	4.76	
6561	Rnf214	-1.01	92	9.24	123	9.14	
6562	Arfp1	-1.01	113	11.98	148	11.84	
6563	Fam149a	-1.01	45	2.06	48	2.03	
6564	Hebp2	-1.01	35	9.81	45	9.7	
6565	Irf2bp1	-1.01	93	12.46	123	12.32	
6566	Mrpl43	-1.01	34	13.96	43	13.8	
6567	Rn60_5_0791.1	-1.01	136	8.67	212	8.58	
6568	Ptpn23	-1.01	255	17.05	347	16.85	
6569	Synj2bp	-1.01	251	13.33	324	13.18	
6570	Dab2ip	-1.01	183	8.8	246	8.7	
6571	St3gal1	-1.01	1422	84.49	1882	83.52	
6572	G3bp1	-1.01	537	28.14	706	27.82	
6573	Cdc42se1	-1.01	157	20.24	207	20.01	
6574	Zfr	-1.01	530	30.64	734	30.28	
6575	Iltfg1	-1.01	424	43.29	580	42.78	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6576	Strn4	-1.01	320	21.77	416	21.5	
6577	Ikzf5	-1.01	20	3.65	31	3.61	
6578	Mcm4	-1.01	120	15.18	144	15	
6579	Mthfd2	-1.01	27	4.92	39	4.86	
6580	Pdhx	-1.01	40	3.71	50	3.66	
6581	Fbxo18	-1.01	485	40.7	640	40.19	
6582	Cenpj	-1.01	76	4.89	93	4.83	
6583	Eif4e	-1.01	164	23.63	235	23.33	
6584	RGD1565775	-1.01	275	22.99	388	22.69	
6585	Atg2b	-1.01	247	8.54	345	8.43	
6586	Amer1	-1.01	28	2.52	33	2.48	
6587	Spast	-1.01	118	5.92	148	5.84	
6588	As3mt	-1.01	100	5.63	106	5.56	
6589	Cib1	-1.01	86	30.89	116	30.49	
6590	LOC100365902	-1.01	55	16.08	61	15.87	
6591	Srsf9	-1.01	202	49.55	273	48.9	
6592	LOC100911238	-1.01	1	44.26	0	43.66	
6593	Rwdd4	-1.01	101	11.76	139	11.6	
6594	Phc1	-1.01	254	21.44	336	21.15	
6595	Cd99l2_2	-1.01	108	44.59	130	43.96	
6596	Cep164	-1.01	125	7.6	180	7.49	
6597	Ncoa2	-1.01	226	14.98	303	14.77	
6598	Zzz3	-1.01	347	16.85	480	16.61	
6599	Gatad2b	-1.01	269	19.45	376	19.17	
6600	Klhl13	-1.01	94	9.98	133	9.83	
6601	Mcee	-1.01	27	9.8	37	9.66	
6602	Pura	-1.01	42	18.37	56	18.11	
6603	Nsrp1	-1.01	83	7.11	114	7.01	
6604	Tm2d3	-1.01	39	10.29	49	10.14	
6605	Lig4	-1.02	107	9.64	148	9.5	
6606	Rmnd5b_2	-1.02	1	25.21	3	24.83	
6607	Zfp644	-1.02	509	20	740	19.69	
6608	Med23	-1.02	216	14.25	298	14.03	
6609	Gorab	-1.02	56	5.57	76	5.49	
6610	Commd8	-1.02	45	10.73	57	10.56	
6611	Trappc9	-1.02	235	9.54	300	9.4	
6612	Ndufa13_2	-1.02	168	140.38	207	138.21	
6613	Psmd5	-1.02	170	23.23	229	22.87	
6614	Exosc10	-1.02	200	18.2	262	17.92	
6615	Elovl6_2	-1.02	36	17.37	55	17.1	
6616	Eci3	-1.02	237	27.8	290	27.35	
6617	C1d	-1.02	55	4.24	79	4.17	
6618	Ect2	-1.02	52	3.41	64	3.35	
6619	Msantd2	-1.02	173	8.26	343	8.13	
6620	Rdh10	-1.02	27	2.34	35	2.3	
6621	Acaa1a	-1.02	95	21.13	122	20.79	
6622	Gpr137b	-1.02	80	2.78	131	2.73	
6623	Idua	-1.02	306	37.3	387	36.69	
6624	Polr3g	-1.02	28	2.06	40	2.03	
6625	Rfc4	-1.02	43	11.63	61	11.44	
6626	Sifn3	-1.02	21	1.31	27	1.28	
6627	Rbm26	-1.02	385	16.96	528	16.68	
6628	Lrrc8b	-1.02	114	14.72	147	14.47	
6629	Cars	-1.02	112	10.99	152	10.81	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6630	Chsy1	-1.02	684	61.15	942	60.11	
6631	Manbal	-1.02	125	36.11	161	35.49	
6632	Cpne1	-1.02	0	5.58	0	5.49	
6633	Vps4a	-1.02	129	19.54	190	19.21	
6634	Sppl2a	-1.02	48	9.79	84	9.62	
6635	Fbxw11	-1.02	358	22.85	448	22.46	
6636	Ppp6c	-1.02	153	24.43	208	24.01	
6637	Ptcd3	-1.02	170	15.01	230	14.75	
6638	Mars	-1.02	182	20.69	244	20.33	
6639	Bcl9l	-1.02	270	14.33	340	14.08	
6640	Gigyf1	-1.02	124	11.12	177	10.93	
6641	Clint1	-1.02	341	26.89	480	26.42	
6642	Clpb	-1.02	72	7.86	103	7.72	
6643	Ralgds	-1.02	50	5.01	67	4.92	
6644	Mgrn1	-1.02	337	42.17	457	41.41	
6645	Setd8	-1.02	122	50.07	182	49.17	
6646	Rnf216	-1.02	419	18.35	553	18.02	
6647	Osbpl9	-1.02	347	34.23	513	33.6	
6648	Tube1	-1.02	40	2.04	45	2.01	
6649	Apbb2	-1.02	18	9.15	22	8.98	
6650	Dph7	-1.02	39	4.02	53	3.95	
6651	Ebp	-1.02	38	10.99	57	10.79	
6652	Fen1	-1.02	42	8	53	7.85	
6653	Hddc2	-1.02	24	4.36	47	4.28	
6654	Klf11	-1.02	95	7.66	137	7.52	
6655	Rad23a	-1.02	152	28.82	196	28.28	
6656	Rnf169	-1.02	74	5.56	102	5.45	
6657	Sergef	-1.02	67	4.01	98	3.94	
6658	LOC100361537	-1.02	201	35.88	276	35.21	
6659	Zfp688	-1.02	22	7	22	6.87	
6660	Zranb3	-1.02	401	17.94	554	17.6	
6661	Mical2	-1.02	1531	58.3	2111	57.18	
6662	Snx6	-1.02	137	17.41	194	17.08	
6663	LOC100911664	-1.02	665	74.61	893	73.17	
6664	Dnajb1	-1.02	136	22.27	181	21.83	
6665	Bcl2l1	-1.02	173	10.73	230	10.52	
6666	Pank1	-1.02	159	16.35	231	16.04	
6667	Hadhb	-1.02	189	33.47	250	32.81	
6668	Ptptra	-1.02	275	23.63	385	23.16	
6669	Phf23	-1.02	138	25.57	174	25.06	
6670	Pcbp4	-1.02	81	13.25	102	12.99	
6671	Pcsk7	-1.02	113	7.74	148	7.59	
6672	Nr2c2	-1.02	136	14.79	187	14.5	
6673	Slco3a1	-1.02	1034	63.3	1750	62.02	
6674	LOC100294508	-1.02	447	33.33	585	32.66	
6675	Arl1	-1.02	95	33.4	126	32.72	
6676	Mrps33	-1.02	34	17.89	52	17.52	
6677	Polb	-1.02	74	9.04	76	8.86	
6678	Huwe1	-1.02	1036	28.24	1388	27.67	
6679	Brpf1	-1.02	139	10.02	188	9.81	
6680	Rbbp7	-1.02	666	122.26	873	119.71	
6681	Slc25a44	-1.02	105	8.27	140	8.1	
6682	Mrpl38	-1.02	59	15.26	74	14.93	
6683	Trip6	-1.02	117	21.51	150	21.05	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6684	Ufl1	-1.02	131	10.37	164	10.15	
6685	Ssr1	-1.02	435	43.51	571	42.58	
6686	Ppp2r5a	-1.02	90	11.3	106	11.05	
6687	Pgam5	-1.02	105	17.09	149	16.71	
6688	LOC100911672	-1.02	70	32.19	110	31.49	
6689	Ahcyl1	-1.02	366	35.03	480	34.26	
6690	Etnk1	-1.02	318	12.94	453	12.65	
6691	App	-1.02	1316	122.9	1778	120.17	
6692	Trdmt1	-1.02	30	2.33	41	2.28	
6693	AABR07035428.1	-1.02	92	6.6	127	6.45	
6694	AC094643.2	-1.02	26	10.53	34	10.29	
6695	AC120727.1	-1.02	18	7.44	25	7.27	
6696	Acbd4	-1.02	29	2.64	33	2.58	
6697	Anks3	-1.02	86	5.3	112	5.19	
6698	Bcs1l	-1.02	16	2.85	21	2.79	
6699	Cbx6	-1.02	265	29.18	345	28.53	
6700	Coch	-1.02	17	1.95	19	1.9	
6701	Gfm2	-1.02	61	3.95	89	3.86	
6702	Lipt2	-1.02	13	2.48	18	2.43	
6703	Lmnb2	-1.02	30	4.55	41	4.45	
6704	Rabgef1	-1.02	95	9.99	119	9.77	
6705	Rfxap_2	-1.02	0	2.85	0	2.78	
6706	Smc2	-1.02	115	7.01	152	6.85	
6707	Zbtb34	-1.02	101	5.23	134	5.12	
6708	Zfp407	-1.02	149	3.62	188	3.54	
6709	Znrd1as1	-1.02	14	1.66	18	1.62	
6710	Prcp	-1.02	127	17.47	156	17.08	
6711	Stxbp2	-1.02	145	19.49	172	19.04	
6712	Dnajc10	-1.02	339	28.77	459	28.11	
6713	Pds5a	-1.02	303	17.25	385	16.86	
6714	Kihl22	-1.02	182	19.08	247	18.64	
6715	Timeless	-1.02	83	5.69	107	5.55	
6716	Smad4	-1.02	318	48.58	446	47.46	
6717	Mt-cox3	-1.02	8904	4150.86	11694	4054.5	
6718	RGD1311345	-1.02	86	8.79	116	8.58	
6719	Arf4	-1.02	520	109.09	674	106.55	
6720	Slc35e2b	-1.02	68	7.39	95	7.22	
6721	Stk38	-1.02	163	19.23	207	18.78	
6722	Xrcc6	-1.02	84	5.92	82	5.78	
6723	Atp6v1b2	-1.02	212	27.07	287	26.42	
6724	Flii	-1.02	417	36.5	536	35.61	
6725	LOC294154	-1.02	70	30.91	91	30.16	
6726	Rbm15	-1.03	128	9.04	174	8.81	
6727	Secisbp2	-1.03	137	11.73	183	11.45	
6728	Brd1	-1.03	346	18.75	487	18.29	
6729	Cnot11	-1.03	79	13.21	104	12.88	
6730	Dgke	-1.03	36	2.73	55	2.66	
6731	Gm17296	-1.03	59	1.76	73	1.72	
6732	Iqgap3	-1.03	52	2.87	62	2.8	
6733	Slc39a5	-1.03	46	5.89	61	5.74	
6734	Socs3	-1.03	23	9.65	30	9.41	
6735	Ubash3b	-1.03	249	9.52	333	9.28	
6736	Prkacb	-1.03	85	25.49	133	24.85	
6737	Rac1	-1.03	350	107.79	491	105.06	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6738	Hsd17b12	-1.03	128	20.56	179	20.04	
6739	Tmem230	-1.03	188	38.4	256	37.43	
6740	Zbtb22	-1.03	56	7.89	73	7.69	
6741	Tex2	-1.03	135	5.66	206	5.52	
6742	Apbb1	-1.03	104	13.6	139	13.25	
6743	Dscr3	-1.03	141	17.09	190	16.64	
6744	Smarcd3	-1.03	205	28.57	262	27.83	
6745	Tctex1d2_1	-1.03	32	13.53	43	13.18	
6746	Ykt6	-1.03	82	21.78	110	21.22	
6747	Polr3a	-1.03	137	7.38	176	7.18	
6748	Hectd4	-1.03	379	9.47	508	9.22	
6749	Rfc3	-1.03	50	11.99	61	11.68	
6750	Zfp598	-1.03	180	19.02	247	18.51	
6751	Rtfdc1	-1.03	231	33.92	304	33.02	
6752	Brca2	-1.03	64	1.86	80	1.81	
6753	Rnh1	-1.03	239	40.98	297	39.89	
6754	Pon2	-1.03	59	23.93	60	23.29	
6755	Ciapi1	-1.03	78	12.32	101	11.99	
6756	Fbln1	-1.03	77	8.21	107	7.98	
6757	Nr1d1	-1.03	70	10.37	92	10.09	
6758	Epdr1	-1.03	111	16.92	164	16.46	
6759	Cdv3	-1.03	130	28.49	144	27.71	
6760	Cstf2	-1.03	165	9.91	202	9.64	
6761	Dennd4c	-1.03	216	10	311	9.72	
6762	Arhgef18	-1.03	207	10.22	302	9.93	
6763	Rbbp6	-1.03	298	13.51	410	13.14	
6764	Cpsf6	-1.03	458	18.84	641	18.32	
6765	Ctsk	-1.03	17	2.56	16	2.49	
6766	AABR07029056.1	-1.03	0	7.67	0	7.45	
6767	AABR07058884.2	-1.03	18	5.67	21	5.51	
6768	Apobec3b	-1.03	12	1.85	17	1.79	
6769	Ddx11	-1.03	10	1.73	13	1.68	
6770	Dnajc4	-1.03	12	3.73	22	3.63	
6771	Entpd7_2	-1.03	26	7.53	32	7.32	
6772	Fbxo4	-1.03	24	3.63	39	3.53	
6773	Ggh	-1.03	10	2.68	12	2.6	
6774	Gucy1b3	-1.03	46	4.51	57	4.38	
6775	Habp4	-1.03	40	4.81	59	4.67	
6776	Haus1_2	-1.03	1	2.3	1	2.24	
6777	Klf10	-1.03	50	6.05	65	5.88	
6778	LOC100912253	-1.03	0	0.89	0	0.86	
6779	LOC102555083	-1.03	0	2.26	0	2.19	
6780	Nr2c2ap	-1.03	38	9.52	46	9.25	
6781	Nup85	-1.03	65	9.92	89	9.64	
6782	Polr2k	-1.03	19	14.01	32	13.61	
6783	Pou6f1	-1.03	30	4.87	43	4.73	
6784	RGD1560883_1	-1.03	24	2.93	35	2.85	
6785	RGD1562608	-1.03	62	0.96	83	0.93	
6786	SNORD36_6	-1.03	0	51	0	49.56	
6787	Tefm	-1.03	25	4.81	30	4.68	
6788	Thap1	-1.03	34	7.29	30	7.09	
6789	Wdr53	-1.03	16	2.48	18	2.41	
6790	Cit	-1.03	41	1.43	51	1.39	
6791	Zc3h4	-1.03	378	20.78	502	20.19	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6792	Pfkfb3	-1.03	77	5.14	99	4.99	
6793	Lyp1a1	-1.03	158	19.06	218	18.51	
6794	Tcf12	-1.03	362	23.69	549	23	
6795	Csrp2bp	-1.03	84	5.46	105	5.3	
6796	Vps8	-1.03	141	9.99	186	9.7	
6797	Wdfy3	-1.03	703	20.9	935	20.28	
6798	Zc3h10	-1.03	48	8.2	67	7.96	
6799	Pdia3	-1.03	776	277.95	920	269.68	
6800	Tet2	-1.03	186	6.11	251	5.93	
6801	Bnip3l	-1.03	578	56.7	803	55	
6802	Abi3bp	-1.03	215	15.11	338	14.65	
6803	Casp2	-1.03	206	19.13	281	18.55	
6804	Psm1	-1.03	529	57.4	705	55.67	
6805	Dpp8	-1.03	377	30.42	507	29.5	
6806	Ap3d1	-1.03	517	36.91	684	35.78	
6807	Cox7b	-1.03	35	48.48	48	47	
6808	Dnajc18	-1.03	85	12.42	133	12.04	
6809	Mfsd1	-1.03	135	19.66	179	19.06	
6810	Agps	-1.03	75	10.1	125	9.79	
6811	Sp110	-1.03	137	22.21	172	21.52	
6812	Il3ra	-1.03	49	6.97	52	6.75	
6813	Rbmx	-1.03	121	19.77	175	19.16	
6814	Tpd52	-1.03	117	13.66	158	13.24	
6815	Cdc5l	-1.03	287	34.21	377	33.14	
6816	Dyrk1b	-1.03	141	17.67	182	17.12	
6817	Sept10	-1.03	93	10.79	134	10.45	
6818	Ube2b	-1.03	285	54.75	439	53.04	
6819	RGD735065	-1.03	154	31.28	190	30.3	
6820	Fam73a	-1.03	80	8.84	118	8.56	
6821	Slc25a4	-1.03	370	103.57	487	100.3	
6822	Zdhhc2	-1.03	194	31.09	255	30.11	
6823	RGD1561149	-1.03	62	4.27	80	4.14	
6824	Taf6	-1.03	189	22.32	243	21.6	
6825	Cnot2	-1.03	222	30.28	304	29.31	
6826	Ahcyl2	-1.03	96	3.64	128	3.52	
6827	Irgq	-1.03	22	3.09	25	2.99	
6828	Irfg2	-1.03	47	5.51	69	5.33	
6829	Pygl	-1.03	24	2.14	37	2.07	
6830	Ap3s2	-1.03	100	24.86	138	24.05	
6831	Ccdc106	-1.03	33	6.03	45	5.84	
6832	Fbxw9	-1.03	40	6.44	48	6.23	
6833	Fchsd2	-1.03	143	5.51	170	5.33	
6834	Hinfp	-1.03	59	10.15	74	9.82	
6835	Odf1	-1.03	45	3.47	56	3.35	
6836	Rbx1	-1.03	148	56.47	201	54.63	
6837	Zfp612	-1.03	48	6.07	80	5.87	
6838	Zfp64	-1.03	83	7.44	113	7.2	
6839	Rpl12	-1.03	45	118.01	51	114.1	
6840	Atp6v1g1	-1.03	186	58.66	242	56.71	
6841	Epm2aip1	-1.03	370	18.33	479	17.72	
6842	Pign	-1.03	120	7.56	148	7.31	
6843	Plekhh3	-1.03	45	4.97	57	4.8	
6844	Desi1	-1.03	63	10.48	85	10.13	
6845	B2m	-1.03	319	63.02	414	60.89	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6846	Gid8	-1.03	107	26.82	139	25.92	
6847	Naa60	-1.04	27	13.97	27	13.49	
6848	Rheb	-1.04	138	38.06	222	36.76	
6849	AABR07043829.2	-1.04	50	5.75	64	5.55	
6850	Brms1l	-1.04	0	2.62	0	2.53	
6851	Cryzl1	-1.04	65	4.75	114	4.59	
6852	Lamtor4	-1.04	10	14.36	7	13.87	
6853	Pcnt	-1.04	178	5.52	230	5.33	
6854	Scrn3	-1.04	63	5.5	71	5.31	
6855	Sec22a	-1.04	80	10.63	109	10.26	
6856	Hmgxb3	-1.04	99	7.65	144	7.39	
6857	Ccar2	-1.04	377	36.01	492	34.76	
6858	Ghitm	-1.04	233	59.53	323	57.47	
6859	Dicer1	-1.04	252	8.45	323	8.16	
6860	LOC100360260_1	-1.04	125	50.6	169	48.84	
6861	Gpsm1	-1.04	157	11.27	214	10.88	
6862	Btaf1	-1.04	201	7.35	281	7.09	
6863	Sbf1	-1.04	419	22.47	540	21.68	
6864	Actl6a	-1.04	153	15.62	223	15.06	
6865	Aldh16a1	-1.04	73	8.45	102	8.15	
6866	Amn1	-1.04	74	9.07	114	8.75	
6867	Atp6v0e1	-1.04	177	24.16	233	23.31	
6868	Dhrs7	-1.04	76	17.39	104	16.77	
6869	Lrif1	-1.04	44	3.47	76	3.34	
6870	Arhgef11	-1.04	417	24.56	548	23.69	
6871	Chchd10	-1.04	195	62.28	251	60.07	
6872	Plekhg3	-1.04	116	8.08	163	7.79	
6873	Dusp18	-1.04	140	10.14	182	9.78	
6874	LOC100359916	-1.04	618	163.13	766	157.32	
6875	ltsn1	-1.04	178	11.54	253	11.12	
6876	Cd81	-1.04	1913	504.21	2531	486.16	
6877	Wdr5	-1.04	149	21.4	202	20.63	
6878	Dbr1	-1.04	44	5.86	56	5.65	
6879	Limd1	-1.04	140	11.58	179	11.17	
6880	Msmo1	-1.04	357	63.64	466	61.34	
6881	Mrps18b	-1.04	58	10.47	76	10.09	
6882	Reck	-1.04	161	11.61	213	11.19	
6883	Cenpf	-1.04	56	1.87	73	1.8	
6884	Tceb3	-1.04	245	23.75	318	22.87	
6885	Atp5j2	-1.04	59	50.98	82	49.1	
6886	Lancl2	-1.04	71	12.28	92	11.82	
6887	LOC680227	-1.04	3179	14.59	4044	14.05	
6888	Oser1	-1.04	86	16.31	108	15.7	
6889	Arfgap3	-1.04	116	12.54	146	12.07	
6890	Epb41l3	-1.04	126	6.75	172	6.49	
6891	Dock9	-1.04	238	5.86	310	5.64	
6892	Gnai2	-1.04	1048	169.78	1383	163.3	
6893	AC120712.2	-1.04	8	2.87	26	2.76	
6894	Bbs4	-1.04	93	7.07	126	6.79	
6895	Lca5	-1.04	18	0.64	31	0.61	
6896	Ndufc1	-1.04	22	13.2	24	12.69	
6897	Rad9b	-1.04	29	1.47	36	1.41	
6898	Rpl30	-1.04	1	7.28	4	7	
6899	Tgm2	-1.04	7	0.72	10	0.69	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6900	Timm44	-1.04	114	18.48	160	17.76	
6901	AABR07030729.1	-1.04	1	2.53	1	2.43	
6902	AC103574.4	-1.04	22	18.37	22	17.65	
6903	Btg2	-1.04	36	4.95	45	4.75	
6904	Celf5	-1.04	10	0.58	9	0.56	
6905	Cln5	-1.04	21	3.77	27	3.63	
6906	Cmc1	-1.04	28	7.5	43	7.21	
6907	Commd10	-1.04	60	12.28	88	11.8	
6908	Cyp2c13_1	-1.04	160	30.58	202	29.4	
6909	Daam2	-1.04	12	0.76	14	0.73	
6910	Ddx23	-1.04	332	36.44	437	35.03	
6911	Dhrsx	-1.04	63	6.16	73	5.92	
6912	Dnah11	-1.04	25	0.19	25	0.18	
6913	Echdc2	-1.04	8	1.82	10	1.75	
6914	Efcab7	-1.04	27	1.18	30	1.13	
6915	Ereg	-1.04	24	3.62	29	3.48	
6916	Gatsl3	-1.04	8	1.6	11	1.54	
6917	Ilf2	-1.04	126	15.87	176	15.26	
6918	LOC100360726	-1.04	21	1.59	27	1.53	
6919	Lrrc48	-1.04	26	1.4	32	1.34	
6920	Mmaa	-1.04	25	1.74	29	1.67	
6921	Mto1	-1.04	55	6.39	72	6.14	
6922	Pak1	-1.04	20	1.5	22	1.44	
6923	Pla2g15	-1.04	48	5.58	64	5.36	
6924	Prss12	-1.04	11	1.01	10	0.97	
6925	Rbm25	-1.04	20	10.69	27	10.28	
6926	RGD1560017	-1.04	4	4.77	5	4.59	
6927	RT1-A3	-1.04	8	2.52	6	2.42	
6928	Tfb1m	-1.04	26	3.2	52	3.07	
6929	Tipin	-1.04	24	8.99	31	8.64	
6930	Traip	-1.04	20	2.31	27	2.22	
6931	Vamp4	-1.04	85	3.87	96	3.72	
6932	Wdsub1	-1.04	57	6.26	82	6.02	
6933	Ptgfrn	-1.04	438	26.91	566	25.85	
6934	Abcf1	-1.04	277	30.01	372	28.82	
6935	Epc1	-1.04	261	15.87	351	15.24	
6936	Pcnx	-1.04	418	16.77	539	16.1	
6937	Actr8	-1.04	126	19.21	176	18.45	
6938	Daxx	-1.04	117	16.1	157	15.46	
6939	Atp5f1_1	-1.04	0	15.44	0	14.83	
6940	Far1	-1.04	150	7.36	216	7.06	
6941	Ccdc91	-1.04	118	12	149	11.52	
6942	Bud13	-1.04	90	13.57	121	13.02	
6943	Spsb3	-1.04	112	11.01	153	10.56	
6944	Pla2g12a	-1.04	75	14.18	92	13.61	
6945	Tmem181	-1.04	85	11.72	102	11.24	
6946	Tmem131	-1.04	386	22.54	496	21.63	
6947	Nol11	-1.04	147	17.82	193	17.09	
6948	Armc7	-1.04	130	8.1	165	7.77	
6949	Gnb1	-1.04	550	138.02	730	132.39	
6950	Anks1a	-1.04	417	16.42	542	15.75	
6951	Man2a2	-1.04	275	21.76	349	20.87	
6952	Trim2	-1.04	492	24.71	664	23.7	
6953	Lsm8	-1.04	61	20.9	77	20.04	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
6954	Ehmt1	-1.04	415	17.44	567	16.72	
6955	Angel1	-1.04	46	3.13	62	3	
6956	Pcdhgb7	-1.04	38	5.83	44	5.59	
6957	Rnf26	-1.04	78	12.84	100	12.31	
6958	Slc12a6	-1.04	146	6.6	194	6.32	
6959	Cfap20	-1.04	49	11.97	69	11.47	
6960	Acadl	-1.04	142	27.22	188	26.09	
6961	Bhlhb9	-1.04	69	9.52	91	9.12	
6962	AABR07011996.1	-1.04	33	3.42	41	3.27	
6963	Anln	-1.04	20	3.35	24	3.21	
6964	Plekhf1	-1.04	32	7.84	41	7.51	
6965	Vwa1	-1.04	35	4.07	41	3.9	
6966	Cst3	-1.04	467	254.6	575	243.79	
6967	Gxylt1	-1.04	231	10.78	320	10.32	
6968	Pla2g4b	-1.04	75	5.9	85	5.65	
6969	Pdia4	-1.04	821	126.86	1068	121.46	
6970	Sec23a	-1.04	215	17.56	286	16.81	
6971	Gnpat	-1.04	100	12.28	134	11.75	
6972	Inpp5b	-1.04	57	7.79	71	7.46	
6973	Rpl27a	-1.04	150	112.35	127	107.56	
6974	Ybx3	-1.04	292	48.57	376	46.49	
6975	Pdgfd	-1.04	158	10.41	212	9.97	
6976	Hnrnpab_1	-1.04	0	48.47	0	46.39	
6977	Hspd1	-1.04	376	83.57	512	79.98	
6978	Acsf3	-1.04	61	8.72	92	8.35	
6979	Afg3l1	-1.04	141	17.41	181	16.66	
6980	Col4a2	-1.04	101	7.33	132	7.02	
6981	Nmnat1	-1.04	42	4.3	41	4.12	
6982	Prpf31	-1.04	55	7.53	74	7.21	
6983	RGD1309104	-1.04	62	5.44	100	5.21	
6984	Rps6kb2	-1.04	28	5.08	37	4.86	
6985	Tpcn2	-1.04	51	3.01	60	2.88	
6986	Mta1	-1.05	317	32.13	429	30.74	
6987	Lats1	-1.05	351	15.53	461	14.86	
6988	Bbs2	-1.05	94	9.57	129	9.15	
6989	Ldah	-1.05	100	9.03	121	8.64	
6990	Polr1a	-1.05	172	9.27	235	8.87	
6991	AABR07012047.1	-1.05	47	4.63	58	4.43	
6992	Ypel5	-1.05	248	29.47	326	28.18	
6993	Finc	-1.05	770	30.52	988	29.19	
6994	Rps14	-1.05	17	116.72	9	111.6	
6995	Atp7a	-1.05	175	8.94	215	8.55	
6996	Zfand3	-1.05	442	37.6	629	35.95	
6997	Ttc4	-1.05	76	5.41	98	5.17	
6998	AY172581.9	-1.05	2074	796.32	2676	761.21	
6999	Ifngr1	-1.05	159	26.76	208	25.58	
7000	Cand1	-1.05	434	34.45	557	32.92	
7001	Kpna2	-1.05	47	28.01	55	26.76	
7002	Acy3	-1.05	42	9.81	54	9.37	
7003	Cbr4	-1.05	23	5.58	27	5.33	
7004	Dera	-1.05	122	18.86	140	18.01	
7005	Gtf2f2	-1.05	52	4.5	77	4.3	
7006	RGD1311517	-1.05	39	3.72	40	3.55	
7007	Slx4ip	-1.05	64	2.16	82	2.07	

Supplemental Table 3  
FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7008	Tmem79	-1.05	9	1.07	14	1.02	
7009	Gcfc2	-1.05	36	2.52	41	2.41	
7010	Rabl6	-1.05	403	40.07	514	38.27	
7011	Psma2	-1.05	224	94.04	297	89.82	
7012	Zfp148	-1.05	257	22.4	337	21.39	
7013	Csnk1e	-1.05	204	20.06	265	19.15	
7014	Tanc1	-1.05	689	23.49	926	22.43	
7015	Chd4	-1.05	1319	70.34	1709	67.14	
7016	Psen1	-1.05	205	30.95	277	29.54	
7017	Dguok	-1.05	113	14.04	148	13.4	
7018	Ppp1r10	-1.05	247	20.47	325	19.54	
7019	Tacc3	-1.05	56	9.09	66	8.67	
7020	Dctn5	-1.05	60	10.32	82	9.85	
7021	Kihl42	-1.05	52	5.27	69	5.03	
7022	Tbc1d1	-1.05	142	5.85	166	5.58	
7023	Ctage5	-1.05	140	15.51	199	14.8	
7024	Scamp1	-1.05	207	13.44	260	12.82	
7025	LOC100362142	-1.05	239	60	289	57.23	
7026	Rbm38	-1.05	37	6.22	51	5.93	
7027	Tatdn2	-1.05	96	10.96	124	10.45	
7028	Thap7	-1.05	38	5.27	48	5.03	
7029	Efr3a	-1.05	266	17.8	352	16.98	
7030	Med24	-1.05	205	18.34	268	17.49	
7031	Psma6	-1.05	128	39.44	172	37.62	
7032	Dnmt1	-1.05	358	20.19	454	19.26	
7033	Wdfy2	-1.05	220	9.2	302	8.78	
7034	Frmf8	-1.05	141	15.95	208	15.21	
7035	Ptprk	-1.05	775	37.39	1067	35.66	
7036	Rnf145	-1.05	346	36.35	460	34.66	
7037	Nfe2l2	-1.05	426	57.6	551	54.91	
7038	LOC306766	-1.05	188	24.61	241	23.46	
7039	Mtpap	-1.05	56	5.4	78	5.15	
7040	Slc25a38	-1.05	52	7.49	85	7.14	
7041	Tmem173	-1.05	42	7.1	55	6.77	
7042	Acaca	-1.05	238	10.66	294	10.16	
7043	Ap1b1	-1.05	180	15.64	237	14.91	
7044	Mau2	-1.05	442	15.5	560	14.77	
7045	Tbp	-1.05	72	9.89	92	9.42	
7046	Dcaf12	-1.05	73	13.65	99	13	
7047	Hnrnpm	-1.05	433	47.61	559	45.36	
7048	Arid2	-1.05	453	19.1	593	18.2	
7049	Prps1	-1.05	64	11.33	79	10.79	
7050	Tm9sf2	-1.05	413	44.91	518	42.78	
7051	Atl2	-1.05	189	13.07	260	12.45	
7052	Cabin1	-1.05	202	7.28	252	6.93	
7053	Coq2	-1.05	97	14.88	120	14.17	
7054	Gatc	-1.05	98	13.53	101	12.89	
7055	Timm22	-1.05	76	14.68	99	13.98	
7056	Tnpo2	-1.05	538	38.26	698	36.43	
7057	LOC100912282	-1.05	1	20.44	0	19.46	
7058	Man2a1	-1.05	1752	80.15	2250	76.29	
7059	Ipo5	-1.05	518	58.97	685	56.12	
7060	AABR07066142.1	-1.05	0	7.63	0	7.26	
7061	Abhd10_2	-1.05	0	2.78	1	2.65	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7062	Ccdc104	-1.05	54	8.32	66	7.92	
7063	LOC364561	-1.05	84	25.83	105	24.58	
7064	Naf1	-1.05	31	1.45	43	1.38	
7065	Slc10a3	-1.05	57	10.74	70	10.21	
7066	Tpk1	-1.05	67	2.39	89	2.28	
7067	AABR07001923.1	-1.05	11	2.12	14	2.02	
7068	Ermard	-1.05	100	7.82	120	7.44	
7069	Fbxo10	-1.05	82	4.87	110	4.64	
7070	LOC100911822	-1.05	4	4.48	1	4.26	
7071	Mettl17	-1.05	43	6.83	64	6.5	
7072	Ocrl	-1.05	101	5.34	132	5.09	
7073	Snip1	-1.05	0	4.85	0	4.61	
7074	Zfp286a	-1.05	14	1.29	20	1.23	
7075	Zswim3	-1.05	37	2.96	55	2.82	
7076	Tiparp	-1.05	190	25.99	263	24.72	
7077	Tbc1d14	-1.05	326	17.87	405	16.99	
7078	Rbm4b_1	-1.05	106	25.16	134	23.92	
7079	Rpl3	-1.05	1094	286.13	1412	272.07	
7080	Fmnl2	-1.05	149	10.04	195	9.54	
7081	Msantd4	-1.05	93	11.37	118	10.81	
7082	Dnaja4	-1.05	89	11.69	109	11.11	
7083	Plcb3	-1.05	160	14.8	210	14.06	
7084	Socs4	-1.05	56	8.67	67	8.24	
7085	Larp4b	-1.05	157	19.44	220	18.47	
7086	Mob4	-1.05	98	12.34	136	11.72	
7087	Gna13	-1.05	405	23.21	510	22.04	
7088	Loh12cr1	-1.05	54	7.37	73	7	
7089	Mrpl36_1	-1.05	31	15.65	43	14.86	
7090	Rbm43	-1.05	46	7.07	62	6.71	
7091	Rpl6	-1.05	74	240.57	63	228.44	
7092	Nisch	-1.05	1644	103.18	2305	97.97	
7093	Scfd1	-1.05	162	16.87	215	16.02	
7094	Atp6v1a	-1.05	214	20.11	258	19.09	
7095	Dpy19l4	-1.05	91	9.22	151	8.75	
7096	Mul1	-1.05	90	7.58	118	7.2	
7097	Wtap	-1.05	228	19.13	315	18.15	
7098	Cd2bp2	-1.05	195	23.94	249	22.72	
7099	Cars2	-1.05	77	5.22	110	4.95	
7100	Cirbp	-1.05	149	26.76	201	25.4	
7101	Gemin8	-1.05	34	8.12	41	7.71	
7102	LOC102551819	-1.05	26	3.99	33	3.79	
7103	Mcmbp	-1.05	153	19.07	209	18.1	
7104	Mrpl40	-1.05	28	3.92	33	3.72	
7105	Slbp	-1.05	135	28.42	175	26.97	
7106	Abhd14b	-1.05	91	17.34	116	16.45	
7107	H3f3b_2	-1.05	363	425.5	442	403.73	
7108	Lgr4	-1.05	212	17.69	281	16.79	
7109	Ltbr	-1.05	331	55.14	429	52.31	
7110	Ptdss1	-1.05	165	18.76	225	17.79	
7111	Fip1l1	-1.05	219	22.44	302	21.28	
7112	Tacc2	-1.05	179	3.99	242	3.79	
7113	Calm3	-1.05	263	48.51	298	46.01	
7114	Rell1	-1.05	204	18.69	300	17.73	
7115	0610010F05Rik	-1.05	93	5.84	164	5.54	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7116	Dap3	-1.05	127	13.61	194	12.9	
7117	Glb1l	-1.05	52	6.44	66	6.1	
7118	Slc33a1	-1.05	108	9.55	157	9.06	
7119	Cep68	-1.05	131	14.91	171	14.13	
7120	Nt5c2	-1.05	135	19.98	199	18.94	
7121	Tcf25	-1.05	668	59.63	860	56.53	
7122	Abce1	-1.05	281	27.81	358	26.36	
7123	Stard7	-1.05	211	19.58	274	18.56	
7124	Arpc3	-1.05	179	67.44	236	63.92	
7125	Map2k5	-1.05	128	8.85	220	8.39	
7126	Zfp275	-1.05	169	9.8	231	9.29	
7127	Top1	-1.06	396	52.81	401	50.05	
7128	Ptprn	-1.06	91	8.62	112	8.16	
7129	Nfkb2	-1.06	86	10.14	110	9.61	
7130	Sumo2	-1.06	111	128.31	138	121.57	
7131	AC091229.1	-1.06	23	1.92	32	1.82	
7132	Apool	-1.06	58	11.56	84	10.94	
7133	Gpank1	-1.06	33	7	42	6.63	
7134	Irf2bp2	-1.06	82	15.82	101	14.99	
7135	Odf2l	-1.06	26	1.43	47	1.35	
7136	Rapgef3	-1.06	19	1.6	30	1.52	
7137	Srsf2	-1.06	416	60.76	599	57.53	
7138	Mcm7	-1.06	179	24.63	225	23.32	
7139	Stat2	-1.06	166	13.86	206	13.12	
7140	Pan2	-1.06	130	8.74	159	8.27	
7141	Zc3hav1	-1.06	367	23.87	487	22.59	
7142	Slc23a2	-1.06	1335	61.7	1749	58.38	
7143	Ncapd3	-1.06	158	7.79	184	7.37	
7144	Ufd1l	-1.06	164	22.32	210	21.12	
7145	Sdc3	-1.06	401	29.62	515	28.01	
7146	Acat1	-1.06	103	13.75	151	13	
7147	Bzw1	-1.06	371	81.5	490	77.08	
7148	Elp6	-1.06	56	9.35	62	8.84	
7149	LOC288913	-1.06	69	37.3	88	35.27	
7150	Parp1	-1.06	378	33.45	482	31.62	
7151	Hdac4	-1.06	604	31.16	826	29.46	
7152	C2cd2l	-1.06	64	4.72	77	4.46	
7153	Lamtor5	-1.06	56	21.83	85	20.63	
7154	Nlgn2	-1.06	70	4.83	89	4.56	
7155	Nap114	-1.06	318	44.75	420	42.29	
7156	Dsel	-1.06	71	6.48	88	6.12	
7157	Erbp2	-1.06	45	5.5	55	5.19	
7158	Sirt5	-1.06	138	16.25	188	15.36	
7159	Kpna3	-1.06	129	19.19	184	18.13	
7160	Ndufs4	-1.06	235	35.77	301	33.79	
7161	Ndufs4	-1.06	404	30.97	539	29.25	
7162	Arhgap32	-1.06	310	10.24	406	9.67	
7163	Bri3bp	-1.06	24	6.12	32	5.78	
7164	Oxnad1	-1.06	79	4.97	94	4.7	
7165	Ftsj1	-1.06	47	8.32	61	7.86	
7166	Mrps21	-1.06	86	21.07	106	19.9	
7167	Nme3	-1.06	21	10.67	24	10.07	
7168	Pus3	-1.06	20	4.08	26	3.85	
7169	Rps27l	-1.06	77	39.09	100	36.91	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7170	Slc18b1	-1.06	30	2.74	41	2.59	
7171	Sned1	-1.06	59	2.46	71	2.32	
7172	St3gal2	-1.06	576	68.34	721	64.54	
7173	Tspyl4	-1.06	19	3.46	24	3.27	
7174	Arf1	-1.06	447	171.95	570	162.35	
7175	Ptbp1	-1.06	320	109.93	351	103.79	
7176	Trak1	-1.06	202	10.36	277	9.78	
7177	Suclg2	-1.06	400	52.21	492	49.28	
7178	Thoc3	-1.06	68	10.44	81	9.85	
7179	Eif3c	-1.06	746	87.3	940	82.38	
7180	Ttc9c	-1.06	124	18.6	167	17.55	
7181	Bub1	-1.06	46	3.38	58	3.19	
7182	Toe1	-1.06	50	7.67	65	7.23	
7183	Entpd4	-1.06	135	12.32	177	11.62	
7184	Rpl37a	-1.06	156	43.65	188	41.17	
7185	Narf	-1.06	86	10.51	123	9.91	
7186	Plin2	-1.06	138	17.13	160	16.15	
7187	Aasdhppt	-1.06	51	15.52	67	14.63	
7188	Ccdc59	-1.06	28	4.49	45	4.23	
7189	S1pr2	-1.06	74	9.11	91	8.59	
7190	Stoml1	-1.06	28	3.83	29	3.61	
7191	Trmt10c	-1.06	47	6.35	59	5.99	
7192	Selenbp1_1	-1.06	0	48.44	0	45.66	
7193	Fam134b_1	-1.06	71	10.01	78	9.43	
7194	Mybbp1a	-1.06	375	33.5	467	31.56	
7195	Baz2a	-1.06	247	15.97	297	15.05	
7196	Zfp955a	-1.06	50	4.42	63	4.16	
7197	Gon4l	-1.06	209	6.01	262	5.66	
7198	Depdc5	-1.06	182	5.54	240	5.22	
7199	Med20	-1.06	89	14.24	116	13.41	
7200	Nsd1	-1.06	681	21.14	834	19.91	
7201	Tead4	-1.06	94	5.31	117	5	
7202	Sec14l1	-1.06	572	41.66	739	39.23	
7203	Asun	-1.06	113	10.63	161	10	
7204	Chchd1	-1.06	31	17.68	38	16.64	
7205	Cr1s1	-1.06	75	10.46	105	9.84	
7206	Hook2	-1.06	36	3.77	48	3.55	
7207	Pim1	-1.06	29	7.53	36	7.09	
7208	Pou2f1	-1.06	59	3.54	83	3.33	
7209	Sfmbt1	-1.06	145	8.51	209	8.01	
7210	Tusc3	-1.06	147	17.96	172	16.91	
7211	Utp18	-1.06	41	5.96	51	5.61	
7212	Zfp180	-1.06	120	9.96	152	9.38	
7213	Parp14	-1.06	236	11.08	289	10.43	
7214	Phf13	-1.06	140	15.83	176	14.9	
7215	Dclre1b	-1.06	72	5.27	93	4.96	
7216	Kdm2b	-1.06	170	9.74	200	9.16	
7217	Tmtc3	-1.06	133	6.91	170	6.5	
7218	Pip4k2c	-1.06	149	16.71	197	15.72	
7219	Gtf2h1	-1.06	129	11.79	173	11.09	
7220	Fpgs	-1.06	35	5.64	45	5.31	
7221	Tomm40l	-1.06	32	8.92	41	8.39	
7222	Wdr33	-1.06	397	20.16	524	18.96	
7223	Prdx1	-1.06	169	180.02	204	169.3	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7224	Coq6	-1.06	77	13.36	103	12.57	
7225	Mapk8ip3	-1.06	240	12.04	325	11.32	
7226	Dnajb11	-1.06	168	31.38	213	29.5	
7227	Pde7b	-1.06	1064	40.79	1486	38.35	
7228	Aldh3a2	-1.06	153	14.92	190	14.02	
7229	Ergic2	-1.06	135	22.06	179	20.74	
7230	Lztr1	-1.06	165	18.07	205	16.98	
7231	Scg2	-1.06	37	5.26	44	4.94	
7232	Tchp	-1.06	44	4.55	54	4.28	
7233	Ube2r2	-1.06	351	75.32	457	70.79	
7234	Itgb5	-1.06	769	112.28	1001	105.52	
7235	Mttr9	-1.06	187	10.95	251	10.29	
7236	Cnih1	-1.06	160	39.2	208	36.82	
7237	Med10	-1.06	57	14.94	71	14.04	
7238	Ptpn11	-1.06	811	48.97	1042	46	
7239	AY172581.24	-1.06	7703	1818.41	9776	1707.9	
7240	Mbd3	-1.06	142	23.07	150	21.67	
7241	Ep300	-1.06	122	11.49	145	10.79	
7242	Hsd17b7	-1.06	26	7.54	18	7.08	
7243	Hsp90b1	-1.07	2088	235.15	2605	220.79	
7244	Fam96b	-1.07	44	22.47	58	21.09	
7245	Fanci	-1.07	92	3.89	113	3.65	
7246	Farp2	-1.07	147	3.61	236	3.39	
7247	Mcart1_1	-1.07	15	7.92	20	7.43	
7248	Sc5d	-1.07	238	17.45	302	16.37	
7249	Prkcd	-1.07	331	37.32	423	35.02	
7250	Tgoln2	-1.07	464	36.11	591	33.89	
7251	Ndufs1	-1.07	201	22.39	246	21.01	
7252	Rnf115	-1.07	138	17.63	176	16.54	
7253	Zfp462	-1.07	244	8.89	314	8.34	
7254	Zranb2	-1.07	321	32.32	453	30.31	
7255	Ero1l	-1.07	80	9.16	105	8.59	
7256	Grn	-1.07	671	103.74	858	97.26	
7257	Gltscr1l	-1.07	181	5.1	226	4.78	
7258	Crel1	-1.07	181	25.82	217	24.2	
7259	RGD1565297	-1.07	156	51.63	212	48.37	
7260	Slc35c2	-1.07	31	13.07	38	12.25	
7261	Manba	-1.07	89	7.77	118	7.28	
7262	Hn1l	-1.07	176	21.17	213	19.83	
7263	Shisa5	-1.07	180	30.07	229	28.17	
7264	Cnot7	-1.07	208	24.1	276	22.57	
7265	Nhlrc2	-1.07	214	7.85	292	7.35	
7266	Phb2	-1.07	224	57.74	274	54.06	
7267	Tada2b	-1.07	126	12.07	176	11.3	
7268	Mttr4	-1.07	264	15.77	343	14.76	
7269	Sigmar1	-1.07	139	30.1	177	28.17	
7270	Slc30a5	-1.07	182	16.17	232	15.13	
7271	Sipa1l1	-1.07	177	8.51	219	7.97	
7272	Sars	-1.07	196	34.61	251	32.38	
7273	LOC100911959	-1.07	570	58.52	714	54.73	
7274	Nxf1	-1.07	438	47.45	521	44.37	
7275	Tsc22d1	-1.07	3084	215.55	3942	201.5	
7276	AABR07010468.1	-1.07	22	2.07	14	1.94	
7277	C030039L03Rik	-1.07	14	2.27	25	2.13	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7278	Ctsz	-1.07	123	32.07	156	29.97	
7279	Cttnbp2	-1.07	42	1.46	61	1.37	
7280	Ednra	-1.07	134	7.42	178	6.93	
7281	Eme1	-1.07	6	0.52	7	0.48	
7282	Gskip	-1.07	70	6.74	90	6.3	
7283	Islr	-1.07	4	0.73	5	0.68	
7284	Klhdc4_2	-1.07	4	4.51	5	4.22	
7285	Lmo4	-1.07	184	22.1	250	20.65	
7286	Lum	-1.07	8	1.44	11	1.34	
7287	Nova1	-1.07	108	7.25	160	6.78	
7288	Paqr4	-1.07	2	0.35	3	0.33	
7289	Pole3	-1.07	91	14.51	112	13.56	
7290	Pwp2	-1.07	92	8.16	121	7.63	
7291	RGD1560436	-1.07	8	1.34	9	1.25	
7292	Rn60_13_0828.1	-1.07	5	0.37	5	0.34	
7293	Rps27a-ps1	-1.07	0	5.31	0	4.97	
7294	Rsph9	-1.07	10	1.29	15	1.2	
7295	Sae1	-1.07	366	35.89	475	33.54	
7296	Sap30l	-1.07	36	15.83	46	14.79	
7297	Sel1l3	-1.07	7	0.35	7	0.33	
7298	Ufsp1	-1.07	4	2.21	5	2.07	
7299	Zbtb7b	-1.07	80	11.39	104	10.64	
7300	Zdhhc23	-1.07	7	0.7	12	0.66	
7301	AABR07027854.1	-1.07	3	1.31	3	1.22	
7302	AABR07051326.1	-1.07	2	0.53	1	0.5	
7303	AABR07054968.1	-1.07	0	0.99	0	0.93	
7304	AC130866.2	-1.07	0	0.56	0	0.53	
7305	Aebp1	-1.07	5	0.38	5	0.35	
7306	Akr1e2	-1.07	250	48.06	337	44.92	
7307	Alg8	-1.07	40	4.35	74	4.07	
7308	Anapc15	-1.07	10	7.26	10	6.78	
7309	Asic1	-1.07	3	0.34	7	0.32	
7310	Atp6ap1l	-1.07	5	1.28	12	1.2	
7311	Cacna1c	-1.07	8	0.18	20	0.17	
7312	Ckb	-1.07	37	8.41	45	7.86	
7313	Dbndd1	-1.07	8	0.86	10	0.8	
7314	Dync2li1	-1.07	23	4.26	41	3.98	
7315	Eef2kmt	-1.07	10	3.46	20	3.24	
7316	Egflam	-1.07	11	0.33	9	0.31	
7317	Eif3h_2	-1.07	0	1.88	0	1.76	
7318	Eml6	-1.07	30	0.43	35	0.4	
7319	Fmn1	-1.07	22	0.26	14	0.24	
7320	Haghl	-1.07	5	1.15	6	1.07	
7321	Haus5	-1.07	34	1.71	38	1.6	
7322	LOC100361993	-1.07	15	9.57	22	8.94	
7323	LOC100910255_2	-1.07	2	0.24	1	0.22	
7324	LOC102553012	-1.07	4	0.6	5	0.56	
7325	Lppr4	-1.07	5	0.26	7	0.24	
7326	Map10	-1.07	4	0.52	5	0.48	
7327	Mmgt1	-1.07	80	7.03	103	6.57	
7328	Mrpl30	-1.07	3	0.49	5	0.46	
7329	Mtus2	-1.07	28	0.62	37	0.58	
7330	Myh7b	-1.07	8	0.24	10	0.22	
7331	Ndrp3	-1.07	63	18.09	81	16.9	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7332	Pag1	-1.07	14	3.54	17	3.31	
7333	Pcdhga1	-1.07	8	1.2	10	1.12	
7334	Pex1	-1.07	106	6.72	154	6.28	
7335	Pmpca	-1.07	135	20.66	155	19.31	
7336	Ppcdc	-1.07	6	1.07	6	1	
7337	Pyurf11	-1.07	36	5.27	46	4.92	
7338	Rfesd	-1.07	20	9.39	29	8.78	
7339	RGD1311164	-1.07	45	4.54	45	4.24	
7340	Rn60_20_0046.4	-1.07	12	5.37	15	5.02	
7341	rnf141	-1.07	61	11.88	75	11.11	
7342	Rnf43	-1.07	22	1.23	25	1.15	
7343	Scnm1	-1.07	14	4.19	19	3.91	
7344	Scube3	-1.07	28	0.49	41	0.45	
7345	Sfi1	-1.07	100	3.96	135	3.7	
7346	Slc7a8	-1.07	15	1.04	26	0.98	
7347	SNORA7_2	-1.07	0	20.69	0	19.34	
7348	Syde2	-1.07	68	5.35	100	5	
7349	Tbcd	-1.07	243	15.35	309	14.34	
7350	Tbx10	-1.07	8	1.4	6	1.31	
7351	Tex26	-1.07	10	0.84	10	0.78	
7352	Ticrr	-1.07	30	1.11	31	1.04	
7353	Tigd5	-1.07	12	1.72	15	1.61	
7354	Tmem234	-1.07	14	1.79	14	1.67	
7355	Trpv6	-1.07	30	1.49	52	1.39	
7356	Ttc25	-1.07	11	0.59	13	0.55	
7357	Xpa	-1.07	39	1.2	61	1.12	
7358	Zbtb8b	-1.07	6	0.54	6	0.5	
7359	Zfp473	-1.07	4	0.45	6	0.42	
7360	Zfp69	-1.07	5	0.6	9	0.56	
7361	Ctsb	-1.07	849	153.07	1044	143.01	
7362	Atf6	-1.07	271	18.94	354	17.68	
7363	Zfp260_2	-1.07	124	21.07	143	19.67	
7364	LOC100362038	-1.07	398	19.43	497	18.14	
7365	Scaf1	-1.07	404	34.04	510	31.78	
7366	Adcy6	-1.07	580	33.93	722	31.68	
7367	Tra2b	-1.07	370	63.87	438	59.62	
7368	Sec31a	-1.07	651	48.03	847	44.83	
7369	Tcaf1	-1.07	132	12.26	170	11.44	
7370	Ptch1	-1.07	139	5.64	177	5.26	
7371	Nadk	-1.07	395	34.39	513	32.08	
7372	Atp6ap1	-1.07	432	70.34	545	65.61	
7373	Arid1a	-1.07	778	32.87	996	30.65	
7374	Cnot10	-1.07	133	15.83	176	14.76	
7375	Gbf1	-1.07	498	22.27	648	20.76	
7376	Gphn	-1.07	145	9.6	202	8.95	
7377	Pik3c3	-1.07	102	8.99	122	8.38	
7378	Snrnp200	-1.07	957	50.72	1211	47.27	
7379	Gsta4	-1.07	216	74.21	273	69.15	
7380	Mrps27	-1.07	108	10.45	144	9.74	
7381	Polr3b	-1.07	83	5.7	114	5.31	
7382	Zcchc17	-1.07	115	13.39	128	12.47	
7383	Elf2	-1.07	169	11.4	226	10.62	
7384	Csf1	-1.07	63	5.1	75	4.75	
7385	Ddx10	-1.07	78	6.15	99	5.73	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7386	Med4	-1.07	64	14.52	79	13.51	
7387	Wdfy1	-1.07	197	12.73	350	11.86	
7388	Cdk14	-1.07	127	4.19	175	3.9	
7389	Sfr1	-1.07	156	34.97	197	32.55	
7390	Rreb1	-1.07	231	7.73	311	7.19	
7391	Nrbp1	-1.07	274	45.9	344	42.7	
7392	Pithd1	-1.07	62	11.51	74	10.71	
7393	Vav2	-1.07	74	3.16	90	2.94	
7394	Slc12a7	-1.07	340	19.03	432	17.7	
7395	Syt11	-1.08	139	10.8	172	10.04	
7396	Ap2a1	-1.08	373	35.91	466	33.4	
7397	Pgm3	-1.08	43	6	59	5.58	
7398	Rpl7l1	-1.08	82	40.07	105	37.26	
7399	Wdr4	-1.08	64	4.11	92	3.83	
7400	Ubt2	-1.08	60	5.55	80	5.16	
7401	Txndc15	-1.08	137	28.33	164	26.34	
7402	Atad5	-1.08	56	2.21	70	2.05	
7403	AABR07007000.1	-1.08	39	28.81	47	26.78	
7404	Ankmy2	-1.08	271	30.56	316	28.41	
7405	Zfp157	-1.08	55	4.15	68	3.86	
7406	Lmtk2	-1.08	361	14.31	469	13.3	
7407	Cdc25a	-1.08	136	11.33	162	10.53	
7408	Elof1	-1.08	111	34.84	139	32.38	
7409	LOC100363472	-1.08	40	6.8	43	6.31	
7410	Mpc1	-1.08	36	13.44	62	12.48	
7411	Whamm	-1.08	50	4.19	69	3.9	
7412	Zfhx2	-1.08	39	1.34	50	1.24	
7413	Alg12	-1.08	59	5.86	78	5.44	
7414	Pja1	-1.08	220	32.57	284	30.25	
7415	Tpx2	-1.08	69	6.83	88	6.34	
7416	Gnptab	-1.08	247	15.73	314	14.6	
7417	Ptges3	-1.08	360	78.57	475	72.93	
7418	Srrm1	-1.08	576	42.44	740	39.39	
7419	Trim46	-1.08	39	2.87	51	2.67	
7420	Creb1	-1.08	87	18.65	103	17.31	
7421	Slc9a3r1	-1.08	32	7.04	38	6.53	
7422	Ube2j2	-1.08	153	17.5	199	16.24	
7423	Wapal	-1.08	320	23.35	377	21.67	
7424	Dcaf8	-1.08	470	34.25	643	31.79	
7425	Tmem175	-1.08	148	13.3	192	12.34	
7426	Ago1	-1.08	172	19.82	220	18.38	
7427	Alg14	-1.08	75	12	97	11.12	
7428	Ndufb3	-1.08	26	12.73	45	11.8	
7429	Npepl1	-1.08	176	28.86	232	26.75	
7430	Cryz	-1.08	36	4.76	43	4.41	
7431	Rad9a	-1.08	33	7.68	39	7.12	
7432	Tmem64	-1.08	28	7.94	38	7.36	
7433	Zfp654	-1.08	25	5.28	31	4.9	
7434	Epn2	-1.08	511	30.28	630	28.07	
7435	Eif1ax	-1.08	180	18.62	228	17.26	
7436	Tanc2	-1.08	734	16.62	838	15.4	
7437	RGD1309188	-1.08	71	8.89	88	8.24	
7438	Tlk2	-1.08	201	13.95	269	12.93	
7439	Map1lc3b	-1.08	384	36.21	474	33.54	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7440	Lrrc40	-1.08	82	8.18	86	7.58	
7441	Zfp771	-1.08	90	17.46	131	16.17	
7442	RGD1306502	-1.08	66	4.46	80	4.13	
7443	Ppp1r8	-1.08	178	22.31	241	20.67	
7444	Chkb	-1.08	89	18.98	87	17.57	
7445	B4galt5	-1.08	125	10.46	171	9.69	
7446	LOC619574	-1.08	113	16.48	137	15.26	
7447	AABR07059639.1	-1.08	0	1.65	0	1.53	
7448	Bcl9	-1.08	211	10.64	258	9.85	
7449	G4	-1.08	43	7	53	6.48	
7450	Mrpl2	-1.08	26	7.19	34	6.66	
7451	Tssc4	-1.08	73	16.52	87	15.29	
7452	Pex12	-1.08	21	3.24	30	3	
7453	Rev3l	-1.08	217	5.61	265	5.2	
7454	Rnf25	-1.08	86	14.25	119	13.19	
7455	Vkorc1l1_1	-1.08	0	14.32	0	13.25	
7456	Zfp869	-1.08	50	9.55	58	8.84	
7457	Stat3	-1.08	535	38.84	672	35.95	
7458	Rnpepl1	-1.08	200	21.28	244	19.69	
7459	Ubr4	-1.08	1455	31.79	1836	29.42	
7460	Tmem185a	-1.08	106	14.32	132	13.25	
7461	Smc4	-1.08	90	6.83	133	6.32	
7462	Rn60_8_0646.1	-1.08	62	2.99	74	2.77	
7463	Fbxo6	-1.08	120	39.84	149	36.84	
7464	Ttc17	-1.08	199	11.67	281	10.79	
7465	Eif2s2	-1.08	214	46.96	259	43.42	
7466	Agap3	-1.08	220	9.09	298	8.4	
7467	Mcfcd2	-1.08	136	24.13	164	22.3	
7468	Tmed3	-1.08	147	38.51	183	35.59	
7469	Usp54	-1.08	204	7.67	257	7.09	
7470	Osbpl2	-1.08	114	11.86	160	10.96	
7471	Anxa7	-1.08	351	61.94	447	57.23	
7472	Aldh6a1	-1.08	96	14.97	131	13.83	
7473	E2f3	-1.08	72	5.05	124	4.66	
7474	Gspt2	-1.08	18	1.71	24	1.58	
7475	Pcyox1	-1.08	473	77.22	586	71.31	
7476	Rabgap1l	-1.08	104	3.31	189	3.05	
7477	Rad52	-1.08	34	3.04	48	2.8	
7478	Rwdd2b	-1.08	20	2.87	24	2.65	
7479	Ttc19	-1.08	53	5.61	63	5.18	
7480	Zfp677	-1.08	21	3.23	28	2.98	
7481	Ccni	-1.08	752	96.38	927	88.98	
7482	Rn5-8s	-1.08	0	1261.32	0	1164.2	
7483	Pabpc1	-1.08	1431	185.27	1772	171	
7484	LOC100911674	-1.08	137	15.47	167	14.28	
7485	Tsta3	-1.08	74	16.68	97	15.4	
7486	Arih2	-1.08	291	19.8	397	18.27	
7487	Araf	-1.08	189	23.9	252	22.05	
7488	Ppp2r5e	-1.08	302	12.32	341	11.36	
7489	Usp20	-1.08	129	7.67	160	7.07	
7490	Mrm1	-1.08	42	3.8	52	3.51	
7491	Ppp1r13b	-1.08	110	8.91	141	8.21	
7492	RNase_MRP	-1.08	30	39.93	37	36.82	
7493	Slc4a2	-1.08	381	32.16	482	29.65	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7494	Zfp53	-1.08	30	5.49	42	5.06	
7495	Plcd3	-1.08	33	3.7	50	3.41	
7496	Polr3f	-1.08	72	4.72	98	4.36	
7497	Rffl	-1.08	50	2.63	70	2.43	
7498	Tcf7l1	-1.08	254	12.89	359	11.88	
7499	Rpl5	-1.08	630	348.86	771	321.59	
7500	Brcc3	-1.08	73	10.5	89	9.68	
7501	Fbxw4	-1.08	148	13.71	242	12.64	
7502	Pcbp2	-1.08	304	94.82	318	87.39	
7503	Cebpb	-1.09	42	11.15	53	10.28	
7504	Clns1a	-1.09	98	21.55	134	19.86	
7505	Jarid2	-1.09	135	7.37	195	6.79	
7506	Trub1	-1.09	99	4.38	137	4.04	
7507	Zfp719	-1.09	66	7.15	68	6.59	
7508	Dcaf5	-1.09	244	12.19	299	11.23	
7509	Afg3l2	-1.09	174	13.19	220	12.15	
7510	Pkdcc	-1.09	67	10.93	77	10.07	
7511	Itga5	-1.09	71	5.68	87	5.24	
7512	Ints4	-1.09	158	12.33	192	11.35	
7513	Tsc2	-1.09	248	13.65	315	12.56	
7514	Ece1	-1.09	1318	99.3	1635	91.39	
7515	Ybx1	-1.09	110	126.15	139	116.09	
7516	Foxred1	-1.09	37	5.01	45	4.61	
7517	Glr2	-1.09	21	9.93	35	9.14	
7518	Mgme1	-1.09	13	2.3	17	2.12	
7519	Ntmt1	-1.09	73	11.29	72	10.39	
7520	SNORD87	-1.09	0	55.38	0	50.95	
7521	Sp100	-1.09	20	4.63	32	4.26	
7522	Ttc39b	-1.09	26	1.76	25	1.62	
7523	Vps45	-1.09	85	11.79	124	10.85	
7524	Zbtb8os	-1.09	63	11.56	73	10.63	
7525	Zfp715	-1.09	52	7.34	64	6.75	
7526	Tex9	-1.09	33	2.85	29	2.62	
7527	Prkcsh	-1.09	547	93.86	670	86.35	
7528	Uba1	-1.09	1020	101.22	1260	93.11	
7529	Mtor	-1.09	367	13.22	465	12.16	
7530	Mrfap1_2	-1.09	416	106.24	455	97.72	
7531	Trpc4ap	-1.09	595	59.52	780	54.74	
7532	Rtel1	-1.09	145	9.34	196	8.59	
7533	Trim8	-1.09	96	9.18	126	8.44	
7534	Smu1	-1.09	188	34.65	240	31.86	
7535	Pwwp2a	-1.09	152	7.71	171	7.09	
7536	Gba	-1.09	162	30.9	207	28.41	
7537	Papss1	-1.09	189	24.19	246	22.24	
7538	Bcl2l11	-1.09	59	3.38	81	3.11	
7539	Cacnb3	-1.09	150	18.81	197	17.28	
7540	LOC689574	-1.09	133	56.29	164	51.71	
7541	Megf9	-1.09	137	13.09	189	12.02	
7542	Stk4	-1.09	290	16.34	356	15.01	
7543	Man2c1	-1.09	231	21.03	262	19.32	
7544	Psmg1	-1.09	73	25.24	96	23.19	
7545	Ints6	-1.09	139	8.4	185	7.71	
7546	Shc1	-1.09	217	20.87	275	19.17	
7547	Supt4h1	-1.09	92	24.32	131	22.34	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7548	Zbtb24	-1.09	97	6.72	117	6.18	
7549	Acbd6	-1.09	84	8.59	133	7.89	
7550	Fem1b	-1.09	172	25.21	238	23.15	
7551	Rybp	-1.09	178	13.41	235	12.32	
7552	Mrpl51	-1.09	92	14.08	112	12.93	
7553	Pdpr	-1.09	126	11.01	155	10.11	
7554	Rpl4	-1.09	1561	486.33	1870	446.53	
7555	Samd4b	-1.09	323	25.86	398	23.74	
7556	Srp72	-1.09	213	19.01	265	17.45	
7557	Akt1	-1.09	472	67.68	582	62.13	
7558	Ago2	-1.09	135	14.29	169	13.12	
7559	Cmtm4	-1.09	36	5.51	53	5.05	
7560	Paxip1	-1.09	128	8.99	170	8.25	
7561	RGD1566265	-1.09	24	6.49	32	5.96	
7562	Grik1	-1.09	34	2.58	47	2.37	
7563	Zfp266	-1.09	922	51.7	1138	47.43	
7564	Psma3	-1.09	242	27.37	275	25.1	
7565	Tor1b	-1.09	94	9.29	108	8.52	
7566	Esr2	-1.09	706	50.58	962	46.38	
7567	Eif2b1	-1.09	65	10.85	78	9.95	
7568	Recql5	-1.09	85	4.91	111	4.51	
7569	Rnpep	-1.09	117	16.46	149	15.09	
7570	Cers5	-1.09	243	25.91	309	23.76	
7571	Grb2_2	-1.09	273	50.26	352	46.08	
7572	Npc2	-1.09	507	121.07	676	110.99	
7573	Aco1	-1.09	451	42.53	558	38.98	
7574	Atp6v0d1	-1.09	382	74.02	504	67.84	
7575	Lrp3	-1.09	38	2.88	41	2.64	
7576	Mvk	-1.09	49	9.45	51	8.66	
7577	Pced1b	-1.09	102	5.62	101	5.15	
7578	Zfp167	-1.09	55	2.32	94	2.13	
7579	Setd1a	-1.09	347	20.11	427	18.43	
7580	Map3k4	-1.09	202	11.58	244	10.61	
7581	Babam1	-1.09	81	19.1	104	17.5	
7582	Dbt	-1.09	78	8.16	102	7.47	
7583	Clcn7	-1.09	134	14.62	170	13.39	
7584	LOC100360573_1	-1.09	64	228.04	47	208.88	
7585	Cbfb	-1.09	226	23.83	306	21.83	
7586	Txnip	-1.09	1276	167.44	1561	153.36	
7587	Commd4	-1.09	72	14.51	80	13.29	
7588	Ssrp1	-1.09	515	59.7	633	54.66	
7589	Man1a1	-1.09	308	14.62	425	13.39	
7590	Bod1	-1.09	63	12.16	92	11.13	
7591	Cadm1	-1.09	59	8.16	74	7.47	
7592	Mdh2	-1.09	360	96.62	441	88.45	
7593	Mrpl20	-1.09	70	27.67	82	25.32	
7594	Vezf1	-1.09	269	21.88	334	20.02	
7595	Tcn2	-1.09	192	34.89	238	31.93	
7596	Tars2	-1.09	94	10.3	126	9.42	
7597	Ppia	-1.09	191	594	156	543.47	
7598	Wdr81	-1.09	164	7.98	200	7.3	
7599	Kdelc1	-1.09	93	13.9	107	12.72	
7600	Atp13a2	-1.09	184	12.29	228	11.24	
7601	Ruvbl1	-1.09	94	17.9	92	16.38	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7602	Gng5_2	-1.09	49	22.09	61	20.21	
7603	Xpnpep3	-1.09	113	5.24	139	4.8	
7604	Zfp574	-1.09	111	13.24	136	12.11	
7605	Dip2b	-1.09	232	8.77	295	8.02	
7606	Rn60_1_1361.1	-1.09	9	0.41	11	0.38	
7607	Rsl1d1	-1.09	0	2.01	0	1.83	
7608	Sf3a3	-1.09	150	16.75	191	15.3	
7609	Utp23	-1.09	19	5.78	26	5.28	
7610	Aaas	-1.09	80	10.23	104	9.35	
7611	Adam22	-1.09	21	1.4	31	1.28	
7612	Chchd3	-1.09	131	17.33	172	15.84	
7613	Hamp	-1.09	12	9.05	12	8.27	
7614	Map3k14	-1.09	27	0.77	39	0.71	
7615	Meis3	-1.09	29	4.97	39	4.54	
7616	Npdc1	-1.09	196	33.67	304	30.76	
7617	Rpl35a_4	-1.09	0	9.79	0	8.94	
7618	Smpd2	-1.09	37	7.82	49	7.15	
7619	Stk36	-1.09	51	2.59	65	2.37	
7620	Tceanc2	-1.09	50	8.39	68	7.67	
7621	Tmem126b	-1.09	71	10.67	104	9.75	
7622	Unc5c	-1.09	28	0.7	40	0.64	
7623	Vash1	-1.09	18	3.1	23	2.83	
7624	Wdr20	-1.09	118	3.86	182	3.53	
7625	Zfp866_2	-1.09	9	2.84	11	2.59	
7626	Rab20	-1.09	11	2.2	18	2.01	
7627	Anxa2	-1.09	629	159.98	777	146.17	
7628	Prkd3	-1.09	248	19.27	318	17.6	
7629	Zfp444	-1.09	199	13.02	244	11.89	
7630	Prrc2a	-1.1	1813	97.26	2210	88.82	
7631	LOC100909464	-1.1	123	30.11	157	27.49	
7632	Cnm2	-1.1	102	8.52	164	7.77	
7633	Prkdc	-1.1	174	3.6	201	3.28	
7634	Elmo2	-1.1	157	22.43	158	20.47	
7635	Calm1	-1.1	722	176.91	897	161.41	
7636	Mex3c	-1.1	208	25.58	268	23.34	
7637	Necap2	-1.1	185	28.63	234	26.11	
7638	Pcdhga10	-1.1	50	7.5	61	6.84	
7639	Zc3h18	-1.1	258	16.42	312	14.98	
7640	Hps1	-1.1	151	12.06	182	11	
7641	Zfyve9	-1.1	198	12.16	260	11.09	
7642	Xrcc1	-1.1	106	15.86	127	14.46	
7643	Rps8	-1.1	165	305.37	163	278.47	
7644	Psmc2	-1.1	288	62.27	360	56.78	
7645	Mccc2	-1.1	219	28.2	294	25.72	
7646	E4f1	-1.1	101	10.87	118	9.91	
7647	LOC683674	-1.1	54	7.14	67	6.51	
7648	Smdt1	-1.1	41	45.82	51	41.77	
7649	Ube2d1	-1.1	49	10.92	72	9.95	
7650	Ube2o	-1.1	268	21.81	328	19.88	
7651	Gfer	-1.1	72	21.54	90	19.63	
7652	Nelfcd	-1.1	207	30.22	228	27.55	
7653	Ttc1	-1.1	113	18.42	138	16.79	
7654	Prpf8	-1.1	1726	84.05	2135	76.61	
7655	Ambra1	-1.1	501	23.75	646	21.65	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7656	Mbd1	-1.1	225	20.11	284	18.33	
7657	Ppie	-1.1	71	18.57	94	16.92	
7658	Fkbp14	-1.1	51	8.63	49	7.86	
7659	RGD1304884	-1.1	70	6.21	85	5.66	
7660	Qsox1	-1.1	143	13.17	177	12	
7661	Nploc4	-1.1	430	30.46	531	27.75	
7662	Dnal4	-1.1	67	13.45	72	12.25	
7663	Wdr45b	-1.1	191	15.59	237	14.2	
7664	Mknk2	-1.1	301	30.6	362	27.87	
7665	Nampt	-1.1	88	10.51	116	9.57	
7666	Abcd3	-1.1	1030	90.79	1279	82.67	
7667	Tspan6	-1.1	189	40.36	228	36.74	
7668	Fbxo11	-1.1	165	15.65	217	14.24	
7669	Gnpda1	-1.1	74	12.29	86	11.18	
7670	Psmc13	-1.1	258	53.11	319	48.34	
7671	Kbtbd3	-1.1	24	1.71	32	1.56	
7672	Ddx47	-1.1	132	20.38	176	18.54	
7673	Utp15	-1.1	62	8.27	78	7.52	
7674	Smarcd2	-1.1	247	30.51	307	27.75	
7675	Cnot3	-1.1	196	20.85	226	18.96	
7676	Laptm4a	-1.1	1168	219.91	1415	199.98	
7677	LOC502894	-1.1	37	4.94	54	4.49	
7678	AABR07002768.1	-1.1	30	4.3	40	3.91	
7679	Prkra	-1.1	168	25.61	207	23.29	
7680	RGD1305464	-1.1	81	6.69	92	6.09	
7681	Tomm34	-1.1	75	15.03	105	13.66	
7682	Uba2	-1.1	82	29.97	94	27.25	
7683	Blcap	-1.1	125	23.4	152	21.27	
7684	Cdk9	-1.1	197	41.1	240	37.35	
7685	Slc3a2	-1.1	273	44.95	331	40.85	
7686	Zfp787	-1.1	74	9.75	93	8.87	
7687	Ndufv2	-1.1	102	32.17	137	29.23	
7688	AY172581.19	-1.1	68	367.32	85	333.46	
7689	Dennd1b	-1.1	83	6.32	133	5.73	
7690	Hsph1	-1.1	260	25.01	313	22.7	
7691	Patz1	-1.1	248	17.72	309	16.08	
7692	Rn60_X_0744.1	-1.1	12	18.91	17	17.17	
7693	Sgol1	-1.1	16	1.14	18	1.04	
7694	Tipr1	-1.1	102	17.5	139	15.89	
7695	Tyw5	-1.1	28	3.44	40	3.12	
7696	Fahd1	-1.1	28	7.05	34	6.4	
7697	LOC100910792	-1.1	17	2.25	22	2.05	
7698	Mthfd1	-1.1	172	18.25	217	16.57	
7699	Nr4a2	-1.1	15	1.5	19	1.36	
7700	Nt5c3a	-1.1	88	10.06	113	9.13	
7701	Nnt	-1.1	485	38.56	598	35	
7702	Atg13	-1.1	161	33.01	199	29.95	
7703	Scp2	-1.1	170	10.96	209	9.95	
7704	Ift52	-1.1	131	18.53	159	16.81	
7705	Pfdn1	-1.1	122	29.29	181	26.58	
7706	Ctr9	-1.1	373	27.85	459	25.27	
7707	Procr	-1.1	79	18.47	93	16.76	
7708	Vapa	-1.1	394	66.72	492	60.52	
7709	Xpot	-1.1	198	12.58	249	11.41	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7710	Ubxn2b	-1.1	170	9.08	233	8.23	
7711	LOC100362023	-1.1	241	25.07	299	22.74	
7712	Mrpl10	-1.1	51	9.77	62	8.86	
7713	Rufy3	-1.1	93	4.67	116	4.23	
7714	Amfr	-1.1	992	172.03	1262	155.97	
7715	Pknx2	-1.1	436	26.73	591	24.23	
7716	Bap1	-1.1	343	32.72	420	29.66	
7717	Pqbp1	-1.1	195	20.06	206	18.18	
7718	Tk1	-1.1	47	5.39	52	4.88	
7719	Aldh9a1	-1.1	148	26.35	173	23.87	
7720	Chfr	-1.1	129	9.76	149	8.85	
7721	Igf1	-1.1	315	41.76	420	37.83	
7722	Zfp800	-1.1	75	5.89	98	5.34	
7723	Nrd1	-1.1	367	26.79	475	24.26	
7724	Evi5	-1.1	217	11.2	279	10.14	
7725	Tspyl1	-1.1	127	18.11	155	16.4	
7726	LOC102555919	-1.1	20	1.62	26	1.47	
7727	Arhgap33	-1.1	19	1.64	23	1.49	
7728	Bnip1	-1.1	30	6.22	35	5.63	
7729	Cisd2	-1.1	160	19.12	195	17.3	
7730	Cog7	-1.1	90	9.77	122	8.84	
7731	Fan1	-1.1	48	2.65	64	2.4	
7732	Hsd17b8	-1.1	22	4.49	24	4.07	
7733	Ing5	-1.1	129	8.79	162	7.95	
7734	Rapgef1	-1.1	281	21.5	372	19.46	
7735	Mfsd10	-1.1	145	24.6	161	22.26	
7736	Polr2a	-1.1	1044	55.21	1273	49.96	
7737	Fam210a	-1.11	161	5.46	198	4.94	
7738	Thtpa	-1.11	115	17.19	143	15.55	
7739	Ppm1k	-1.11	120	13.34	157	12.07	
7740	Copg1	-1.11	642	39.77	758	35.97	
7741	Copa	-1.11	916	66.99	1150	60.59	
7742	Chd7	-1.11	72	2.27	92	2.05	
7743	Rbm10	-1.11	205	20.62	258	18.65	
7744	Lima1	-1.11	60	3.58	74	3.23	
7745	Smim20	-1.11	61	17.49	85	15.82	
7746	Srd5a3	-1.11	110	19.58	133	17.71	
7747	Lin37	-1.11	48	15.6	58	14.1	
7748	Pdp2	-1.11	43	7.36	52	6.65	
7749	Slc35e3	-1.11	148	17.24	202	15.58	
7750	Pabpc4	-1.11	245	41.19	286	37.22	
7751	Atxn7l4	-1.11	114	1.92	126	1.73	
7752	Gca	-1.11	28	4.7	52	4.25	
7753	Mad2l1	-1.11	29	6.1	37	5.51	
7754	Msrb1	-1.11	27	10	38	9.03	
7755	Papd4	-1.11	138	14.12	195	12.76	
7756	Pop7	-1.11	24	10.31	32	9.31	
7757	Sdccag8	-1.11	182	3.15	379	2.85	
7758	Prickle3	-1.11	38	4.01	65	3.62	
7759	Llgl1	-1.11	316	31.23	383	28.21	
7760	Rbm22	-1.11	115	21.56	148	19.47	
7761	Suco	-1.11	176	11.18	236	10.09	
7762	Chtf8	-1.11	429	50.32	529	45.43	
7763	Lamtor3	-1.11	66	15.85	83	14.31	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7764	Mad2l2	-1.11	36	6.98	38	6.3	
7765	Wdr34	-1.11	57	4.8	67	4.33	
7766	Mettl6	-1.11	44	6.39	66	5.76	
7767	Napg	-1.11	115	8.78	132	7.92	
7768	Prdm11	-1.11	51	1.72	68	1.55	
7769	Lpl	-1.11	29	2.86	36	2.58	
7770	Xpo4	-1.11	133	4.55	174	4.1	
7771	Hs2st1	-1.11	213	16.19	259	14.6	
7772	Ruvbl2	-1.11	109	19.48	121	17.57	
7773	Ubl7	-1.11	202	50.24	244	45.31	
7774	Ascc1	-1.11	198	30.72	216	27.71	
7775	Tmem237	-1.11	92	4.28	103	3.86	
7776	Rnps1	-1.11	352	66.57	427	60.02	
7777	Atad3a	-1.11	130	15.68	157	14.13	
7778	Mfap3	-1.11	112	19.41	139	17.5	
7779	Setd1b	-1.11	149	8.28	188	7.46	
7780	Slc29a3	-1.11	109	9.34	145	8.42	
7781	Dhx37	-1.11	151	12.06	179	10.87	
7782	Gga2	-1.11	87	9.41	109	8.48	
7783	Prkaa1	-1.11	162	11.31	206	10.19	
7784	Rraga	-1.11	146	33.1	175	29.83	
7785	Zfp133	-1.11	62	6.19	76	5.58	
7786	Crel2	-1.11	89	21.04	109	18.96	
7787	Rassf3	-1.11	61	4.29	78	3.87	
7788	Uevld	-1.11	63	5.2	105	4.68	
7789	Capn5	-1.11	201	14.28	258	12.86	
7790	RT1-CE10	-1.11	72	17.92	101	16.14	
7791	Mat2a	-1.11	409	49.78	490	44.82	
7792	Ppp4r1	-1.11	400	33.26	508	29.94	
7793	AABR07061902.1	-1.11	46	14.78	50	13.31	
7794	Ints7	-1.11	193	16.12	244	14.51	
7795	Supt5h	-1.11	569	53	695	47.7	
7796	Vangl2	-1.11	59	4.68	71	4.21	
7797	Bmp1	-1.11	417	34.65	502	31.17	
7798	Cdh3	-1.11	67	5.83	79	5.25	
7799	Actb	-1.11	11218	2956.77	13609	2659.8	
7800	Heatr6	-1.11	150	11.84	190	10.65	
7801	Rps23_1	-1.11	142	199.49	131	179.4	
7802	Cc2d1b	-1.11	153	15.56	193	13.99	
7803	Tada3	-1.11	94	13.83	122	12.43	
7804	Acsl3	-1.11	94	11.62	112	10.45	
7805	Mogs	-1.11	0	12.28	0	11.03	
7806	Rnf31	-1.11	102	10.02	128	9	
7807	Trim5	-1.11	182	13.91	222	12.5	
7808	Rab35	-1.11	136	21.5	164	19.32	
7809	Taldo1	-1.11	149	40.69	175	36.54	
7810	P4ha1	-1.11	401	54.28	499	48.75	
7811	Cyb5b	-1.11	275	19.74	342	17.72	
7812	Plbd2	-1.11	369	59.19	446	53.15	
7813	Psap	-1.11	1324	183.71	1602	164.97	
7814	Trim28	-1.11	796	99.63	961	89.44	
7815	Lrp1	-1.11	2903	70.43	3490	63.19	
7816	AABR07001435.1	-1.11	4	1.47	5	1.32	
7817	Acer2	-1.11	8	0.35	14	0.31	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7818	Baz1b	-1.11	570	25.96	707	23.29	
7819	Cbfa2t2	-1.11	167	11.84	221	10.62	
7820	Cpne7	-1.11	7	0.75	8	0.67	
7821	Cracr2b_2	-1.11	1	1.14	2	1.03	
7822	Gemin2	-1.11	45	3.85	51	3.45	
7823	Igsf10	-1.11	52	1.65	65	1.48	
7824	Inafm1	-1.11	5	1.22	6	1.09	
7825	Kcnb1	-1.11	21	1.63	28	1.46	
7826	Kdm4b	-1.11	263	9.98	350	8.95	
7827	Kin	-1.11	39	4.94	39	4.43	
7828	Mrpl17	-1.11	95	32.92	109	29.53	
7829	Polr2d	-1.11	85	24.35	96	21.85	
7830	Prr22	-1.11	5	0.8	4	0.72	
7831	Sec16b	-1.11	7	0.42	7	0.37	
7832	Slc22a18	-1.11	18	2.36	26	2.11	
7833	SNORD12_3	-1.11	0	59.68	0	53.54	
7834	Yod1	-1.11	19	3.44	18	3.08	
7835	AABR07034532.1	-1.11	0	3.47	0	3.12	
7836	Aarsd1	-1.11	42	3.83	53	3.44	
7837	AC111257.2	-1.11	0	0.67	0	0.6	
7838	Arf5	-1.11	335	113.04	404	101.41	
7839	Atad2	-1.11	75	5.71	99	5.12	
7840	Bbs12	-1.11	10	1.44	12	1.29	
7841	Catsperd	-1.11	65	2.61	57	2.34	
7842	Cdkn3	-1.11	14	4.13	16	3.7	
7843	Cenpi	-1.11	25	1.63	36	1.46	
7844	Col27a1	-1.11	115	5.2	124	4.67	
7845	Cyb561	-1.11	9	0.68	7	0.61	
7846	Cyp2u1	-1.11	117	9.12	128	8.18	
7847	Dact3	-1.11	5	0.65	8	0.58	
7848	Esp1	-1.11	38	2.12	46	1.9	
7849	Fam103a1	-1.11	16	6.87	19	6.16	
7850	Fam109b	-1.11	6	0.68	6	0.61	
7851	Gpalpp1	-1.11	44	8.5	51	7.63	
7852	Minpp1	-1.11	122	25.15	168	22.57	
7853	Nudt19	-1.11	29	6.3	36	5.66	
7854	Pxmp2	-1.11	20	1.98	32	1.78	
7855	RGD1562550	-1.11	9	1.46	13	1.31	
7856	Rhou	-1.11	28	11.79	37	10.57	
7857	Ryr3	-1.11	16	0.12	18	0.11	
7858	Scand1	-1.11	33	11.82	35	10.6	
7859	Sfxn4	-1.11	24	1.37	32	1.23	
7860	Smim11	-1.11	24	10.88	55	9.76	
7861	Snx30	-1.11	54	3.42	47	3.07	
7862	Syt5	-1.11	7	0.99	8	0.89	
7863	Tmem194	-1.11	3	1.52	6	1.36	
7864	Tmem200a_1	-1.11	66	6.64	83	5.96	
7865	Tmem218	-1.11	15	2.83	13	2.54	
7866	Tnfaip2	-1.11	11	0.95	18	0.86	
7867	Wnk4	-1.11	1	0.43	1	0.38	
7868	Zbtb25	-1.11	59	3.38	78	3.03	
7869	Kars	-1.12	285	45.81	350	41.07	
7870	Cct2	-1.12	684	120.69	817	108.17	
7871	Mast4_2	-1.12	163	35.62	202	31.92	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7872	Ncdn	-1.12	151	14.04	183	12.59	
7873	Phf5a	-1.12	132	50.18	158	44.96	
7874	Polr2b	-1.12	252	22.82	318	20.45	
7875	Hspbp1	-1.12	125	26.65	150	23.87	
7876	LOC103689945	-1.12	20	24.27	30	21.74	
7877	Slc9a8	-1.12	195	13.65	249	12.22	
7878	LOC100361515	-1.12	159	19.76	194	17.69	
7879	Mt-nd3	-1.12	605	632.58	719	566.27	
7880	Fam214a	-1.12	484	24.23	675	21.69	
7881	AABR07015165.1	-1.12	121	12.96	141	11.59	
7882	Vps41	-1.12	273	30.03	337	26.86	
7883	RT1-CE5	-1.12	14	10.98	18	9.82	
7884	Nono	-1.12	968	111.61	1156	99.84	
7885	Kif13a	-1.12	528	17.26	648	15.44	
7886	Colgalt1	-1.12	373	44.72	445	39.99	
7887	Fcgrt	-1.12	164	36.91	212	33.01	
7888	Asb7	-1.12	115	7.25	155	6.48	
7889	Tshz2	-1.12	51	6.05	61	5.41	
7890	Spg20	-1.12	144	12.06	197	10.78	
7891	Crtc3	-1.12	360	10.28	509	9.19	
7892	Mical3	-1.12	250	9.78	318	8.74	
7893	Ubac2	-1.12	151	21.5	199	19.21	
7894	Foxj2	-1.12	211	13.96	257	12.47	
7895	Ctsd	-1.12	667	118.54	803	105.89	
7896	5_8S_rRNA_2	-1.12	0	1178.5	0	1052.7	
7897	Farsa	-1.12	174	30.09	206	26.87	
7898	Fam189b	-1.12	70	8.54	81	7.63	
7899	LOC499331	-1.12	36	7.78	49	6.95	
7900	Ip6k2	-1.12	344	19.96	428	17.82	
7901	Nme2	-1.12	178	82.51	216	73.66	
7902	Pak3	-1.12	87	10.74	107	9.59	
7903	Ap2s1	-1.12	113	38.86	136	34.69	
7904	Palm	-1.12	119	23.05	278	20.57	
7905	Gpr173	-1.12	44	2.73	55	2.43	
7906	Slc12a9	-1.12	36	3.43	46	3.06	
7907	Vegfb	-1.12	39	6.28	50	5.61	
7908	Cpox	-1.12	69	8.16	77	7.28	
7909	Gltscr2	-1.12	221	45.02	279	40.17	
7910	Cops4	-1.12	291	46.83	379	41.78	
7911	Oaz2	-1.12	166	72.8	226	64.93	
7912	Atp5g3	-1.12	312	155.1	377	138.33	
7913	Fbxw5	-1.12	188	25.92	206	23.11	
7914	Scmh1	-1.12	123	11.82	167	10.54	
7915	Mrpl39	-1.12	43	9.31	50	8.3	
7916	Ankrd13b	-1.12	34	4.48	61	3.99	
7917	RGD1562161	-1.12	104	7.01	134	6.25	
7918	Siah2	-1.12	36	4.64	40	4.13	
7919	Slc7a6os	-1.12	60	12.59	72	11.23	
7920	Ube2q2	-1.12	46	8.32	62	7.42	
7921	Msto1	-1.12	33	8.63	42	7.69	
7922	Naa20	-1.12	103	13.03	165	11.61	
7923	Sf3a2	-1.12	112	21.18	123	18.87	
7924	Prdx6	-1.12	147	64.73	174	57.65	
7925	Ccndbp1	-1.12	78	15.47	97	13.77	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7926	Vapb	-1.12	93	24.92	121	22.19	
7927	Lrp10	-1.12	400	48.88	480	43.52	
7928	Nlk	-1.12	236	9.99	299	8.9	
7929	Gpr137	-1.12	26	4.6	28	4.09	
7930	Mrpl46	-1.12	29	4.8	33	4.27	
7931	Rabl3	-1.12	26	3.88	32	3.45	
7932	Rcc1	-1.12	52	6.19	68	5.51	
7933	RGD1306271	-1.12	133	4.26	162	3.79	
7934	Cox17	-1.12	26	18.02	44	16.04	
7935	Men1	-1.12	207	24.92	254	22.18	
7936	Bud31	-1.12	102	32.21	120	28.66	
7937	Mt-cytb	-1.12	8112	2594.98	9717	2308.6	
7938	Dzip3	-1.12	82	4.72	114	4.2	
7939	Kctd2	-1.12	81	12.84	103	11.42	
7940	Tmem159	-1.12	205	37.4	301	33.27	
7941	LOC100909476	-1.12	181	31.84	218	28.32	
7942	Ubxn6	-1.12	112	16.22	133	14.43	
7943	Plk4	-1.12	41	3.87	49	3.44	
7944	Rab43	-1.12	54	13.95	77	12.41	
7945	Zfp202	-1.12	69	3.68	105	3.27	
7946	Orc4	-1.12	86	8.14	108	7.24	
7947	LOC361346	-1.13	125	9.58	158	8.52	
7948	Bet1l	-1.13	91	23.61	113	20.99	
7949	Itipr12	-1.13	53	10.12	63	8.99	
7950	Eepd1	-1.13	89	8.5	123	7.55	
7951	Smpd1	-1.13	350	54.88	417	48.77	
7952	Armc5	-1.13	136	13.54	156	12.03	
7953	Khsrp	-1.13	312	32.62	360	28.99	
7954	Gtf2a1	-1.13	308	18.66	359	16.57	
7955	Lpin3	-1.13	144	11.69	164	10.38	
7956	AABR07015066.1	-1.13	0	14.1	0	12.51	
7957	AABR07050438.1	-1.13	106	1.79	135	1.59	
7958	Arl6ip4	-1.13	50	14.64	60	13	
7959	Fam162a	-1.13	77	7.44	79	6.6	
7960	Frs3	-1.13	24	2.87	33	2.55	
7961	Ghdc	-1.13	18	2.69	20	2.39	
7962	LOC500331	-1.13	78	2.4	98	2.13	
7963	Mpdu1	-1.13	43	22.68	50	20.14	
7964	Mrpl48	-1.13	95	13.49	121	11.98	
7965	Nop56	-1.13	145	24.32	193	21.59	
7966	Rbm39	-1.13	1	2.93	1	2.6	
7967	Spryd3	-1.13	57	7.2	71	6.39	
7968	Elk1	-1.13	158	19.19	179	17.03	
7969	Zmat2	-1.13	108	19.83	128	17.59	
7970	Srsf4	-1.13	183	14.94	262	13.26	
7971	Anapc1	-1.13	378	14.17	456	12.57	
7972	RGD1305350	-1.13	250	32	290	28.39	
7973	Tmem59	-1.13	597	131.37	738	116.56	
7974	Chrac1	-1.13	81	32.52	91	28.85	
7975	Drg1	-1.13	134	26.59	177	23.58	
7976	Kcne4	-1.13	59	33.96	70	30.12	
7977	Hmgcs1	-1.13	616	67.02	751	59.43	
7978	Rnasel	-1.13	44	3.25	56	2.88	
7979	Sulf1	-1.13	104	5.8	129	5.15	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
7980	AABR07041096.1	-1.13	113	9.49	136	8.41	
7981	Acadvl	-1.13	140	20.61	163	18.27	
7982	Exoc3	-1.13	121	15.58	146	13.8	
7983	Mkln1	-1.13	189	17.76	217	15.74	
7984	Nudt4	-1.13	152	16.71	178	14.8	
7985	Slc10a7	-1.13	163	7.54	191	6.68	
7986	Ugcg	-1.13	57	7.82	68	6.93	
7987	Zxdc	-1.13	118	11.42	163	10.12	
7988	Slc38a7	-1.13	138	10.33	165	9.15	
7989	Spg7	-1.13	225	16.11	281	14.28	
7990	Cd151	-1.13	5	21.26	5	18.83	
7991	Gbe1	-1.13	108	11.56	145	10.24	
7992	Tgif2	-1.13	77	11.56	95	10.24	
7993	Tbc1d9	-1.13	174	8.06	204	7.14	
7994	Med13l	-1.13	993	33.22	1214	29.42	
7995	Poglut1	-1.13	193	18.64	234	16.51	
7996	Adck4	-1.13	72	6.56	92	5.81	
7997	Atg16l1	-1.13	164	12.49	214	11.06	
7998	Ndc1	-1.13	92	5.71	103	5.06	
7999	Tubgcp6	-1.13	107	6.41	129	5.67	
8000	Fech	-1.13	106	9.28	127	8.22	
8001	Trappc6b	-1.13	50	11.62	73	10.29	
8002	Zbtb4	-1.13	76	8.52	91	7.55	
8003	Lrrc47	-1.13	190	20.4	231	18.06	
8004	Txndc12	-1.13	212	40.12	279	35.52	
8005	Pfn1	-1.13	566	238.72	676	211.31	
8006	U2af2	-1.13	316	47.38	359	41.94	
8007	Ctc1	-1.13	449	34.82	535	30.82	
8008	Map3k10	-1.13	77	5.02	87	4.44	
8009	Rn60_1_2787.1	-1.13	33	4.33	34	3.83	
8010	Rnaseh2a	-1.13	116	21.47	154	19	
8011	Pigt	-1.13	554	83.51	670	73.89	
8012	Ucp2	-1.13	806	179.91	980	159.16	
8013	Arhgef17	-1.13	443	23.7	525	20.97	
8014	Tmed2	-1.13	702	129.26	837	114.33	
8015	Uqcrfs1	-1.13	216	71.08	255	62.87	
8016	Brf1	-1.13	141	10.8	162	9.55	
8017	Nr1h2	-1.13	240	40.23	280	35.58	
8018	Fbxl17	-1.13	238	15.76	296	13.94	
8019	Ptp4a1	-1.13	10	32.29	14	28.55	
8020	Psma5	-1.13	145	45.21	170	39.97	
8021	Emc10	-1.13	166	35.43	200	31.32	
8022	Raet1d	-1.13	11	4.43	13	3.91	
8023	Smap2	-1.13	87	9.16	111	8.1	
8024	AABR07062513.1	-1.13	42	1.94	60	1.71	
8025	Ankrd16	-1.13	25	1.95	46	1.73	
8026	Ccdc8	-1.13	239	26.56	286	23.47	
8027	Dok4	-1.13	32	5.23	39	4.62	
8028	Dtd2	-1.13	26	6.11	29	5.4	
8029	Fbrsl1	-1.13	103	6.48	101	5.73	
8030	Jrk	-1.13	33	5.01	40	4.42	
8031	LOC497934	-1.13	29	6.44	33	5.69	
8032	Mcm8	-1.13	15	1.23	16	1.09	
8033	Mphosph6	-1.13	28	7.5	40	6.63	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8034	Mthfd2l	-1.13	60	1.35	57	1.19	
8035	Pgm2	-1.13	50	7.56	73	6.68	
8036	Rab21	-1.13	64	13.43	85	11.86	
8037	Slc7a2	-1.13	18	1.51	18	1.33	
8038	Snta1	-1.13	33	3.8	42	3.36	
8039	Uprt	-1.13	13	3.11	16	2.74	
8040	Zdhhc3	-1.13	210	15.69	281	13.86	
8041	Zfp354a	-1.13	21	2.84	29	2.51	
8042	Ikbbk	-1.13	130	9.59	182	8.47	
8043	Cmas	-1.13	109	20.13	132	17.77	
8044	Fkrp	-1.13	66	9.21	82	8.12	
8045	Puf60	-1.13	383	67.47	471	59.55	
8046	Fam49b	-1.13	334	54.29	423	47.9	
8047	Aspm	-1.13	50	1.86	60	1.64	
8048	Lss	-1.13	227	20.05	260	17.69	
8049	Alkbh3	-1.13	84	11.21	129	9.88	
8050	Mrps22	-1.13	66	11.4	96	10.05	
8051	Sh3tc1	-1.13	76	5.16	94	4.55	
8052	Spg21	-1.13	143	28.97	193	25.53	
8053	Fut10	-1.13	77	6.26	94	5.52	
8054	Syngap1	-1.13	102	4.76	109	4.2	
8055	Amigo1	-1.13	56	4.37	66	3.85	
8056	Dhrs4	-1.13	48	7.39	47	6.52	
8057	Dph3	-1.13	59	6.25	65	5.51	
8058	Gpm6a	-1.13	33	3.4	39	3	
8059	Mapre3	-1.13	37	5.61	48	4.94	
8060	Ubl4a	-1.13	85	13.04	100	11.49	
8061	Aasdh	-1.13	55	3.07	57	2.71	
8062	lqce	-1.13	63	4.21	81	3.71	
8063	Ncapd2	-1.13	128	9.72	168	8.57	
8064	Psm12	-1.13	184	30.91	234	27.23	
8065	Gdpd5	-1.14	113	10.87	140	9.58	
8066	Rrm1	-1.14	205	24.3	248	21.4	
8067	Mbd5	-1.14	134	5.55	175	4.89	
8068	Stt3b	-1.14	761	44.39	941	39.09	
8069	Ankrd13a	-1.14	408	39.7	502	34.96	
8070	Abcb10	-1.14	63	4.74	77	4.18	
8071	RGD1565685	-1.14	76	12.52	101	11.03	
8072	Dhx33	-1.14	47	6	61	5.28	
8073	Eif3k	-1.14	229	67.91	273	59.79	
8074	Zfp184	-1.14	176	5.45	258	4.8	
8075	Tpd52l2	-1.14	141	16.3	159	14.35	
8076	Pomk	-1.14	381	40.51	448	35.65	
8077	Aamp	-1.14	280	36.03	328	31.71	
8078	Elp3	-1.14	385	37.78	481	33.25	
8079	Slc44a1	-1.14	600	29.7	699	26.13	
8080	Cant1	-1.14	169	22.24	200	19.57	
8081	Aplp1	-1.14	451	70.04	541	61.61	
8082	D2hgdh	-1.14	19	1.7	29	1.5	
8083	Mgat3	-1.14	17	2.3	23	2.02	
8084	Trappc10	-1.14	300	13.99	367	12.3	
8085	Yrdc	-1.14	74	14.66	96	12.89	
8086	Dtnb	-1.14	92	5.32	135	4.68	
8087	Elac1	-1.14	52	4.34	66	3.82	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8088	Lactb	-1.14	37	2.96	42	2.6	
8089	Lin9	-1.14	20	3.67	29	3.23	
8090	Nup62	-1.14	200	26.04	231	22.9	
8091	Psd	-1.14	20	1.54	23	1.35	
8092	RGD1310429	-1.14	29	5.22	38	4.59	
8093	Runx2	-1.14	61	1.09	67	0.96	
8094	Senp7	-1.14	167	7.57	239	6.66	
8095	Zfp174	-1.14	19	2.02	21	1.78	
8096	Sdc4	-1.14	219	31.43	262	27.63	
8097	Fbxo22	-1.14	69	17.98	96	15.81	
8098	Pi4ka	-1.14	312	14.07	381	12.37	
8099	Ifngr2	-1.14	84	10.27	95	9.02	
8100	Tmem260	-1.14	221	9.21	303	8.1	
8101	Mt-nd1	-1.14	2971	1142.32	3523	1004	
8102	Commd1	-1.14	126	12.2	187	10.72	
8103	Map3k11	-1.14	132	12.38	153	10.88	
8104	Pdlim2	-1.14	43	9.48	48	8.33	
8105	Ptprg	-1.14	134	7.03	164	6.18	
8106	Anxa11	-1.14	393	55.35	468	48.62	
8107	Dhx30	-1.14	339	26.42	400	23.2	
8108	Maoa	-1.14	121	17.9	146	15.72	
8109	Ankrd10	-1.14	373	29.88	499	26.24	
8110	Pknox1	-1.14	70	5.34	89	4.69	
8111	Galnt2	-1.14	801	68.43	957	60.09	
8112	Dstyk	-1.14	147	7.82	192	6.86	
8113	Rxb	-1.14	139	11.35	163	9.97	
8114	Cct3	-1.14	516	88.75	589	77.9	
8115	Apex2	-1.14	33	4.51	34	3.96	
8116	Romo1	-1.14	17	20.61	22	18.09	
8117	Sh3gl1	-1.14	249	37.46	295	32.87	
8118	Cep78	-1.14	31	3.42	39	3	
8119	Mrpl4	-1.14	100	21.22	116	18.62	
8120	Nkap	-1.14	30	6.67	36	5.86	
8121	Phykpl	-1.14	0	1.77	0	1.56	
8122	Pkd1	-1.14	827	20.52	967	18.01	
8123	Hspa9	-1.14	330	59.66	395	52.34	
8124	Actr1b	-1.14	319	29.48	370	25.85	
8125	Psmb5	-1.14	194	86.27	244	75.66	
8126	Maged2	-1.14	118	53.84	146	47.22	
8127	Gtf2i	-1.14	1175	80.28	1396	70.4	
8128	Vps72	-1.14	187	43.26	239	37.93	
8129	Ap1s2	-1.14	64	4.79	82	4.2	
8130	Lrrc57	-1.14	24	5.79	34	5.08	
8131	AABR07027910.1	-1.14	29	5.51	34	4.83	
8132	Dnase1l1	-1.14	69	13.14	87	11.52	
8133	Nsmce1	-1.14	69	12.43	75	10.89	
8134	Ptcd1	-1.14	67	6.8	88	5.96	
8135	Cox7a2l	-1.14	229	61.27	282	53.7	
8136	Eif2b5	-1.14	215	24.3	269	21.3	
8137	Preli1	-1.14	111	63.79	174	55.89	
8138	Fam114a1	-1.14	73	13.6	119	11.91	
8139	Smo	-1.14	353	34.35	419	30.09	
8140	Ifi27	-1.14	485	211.43	580	185.21	
8141	Rbbp4	-1.14	117	65.13	154	57.05	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8142	Tenm3	-1.14	347	14.93	427	13.08	
8143	Usp9x	-1.14	1183	32.78	1460	28.71	
8144	Gtf2e1	-1.14	77	9.56	92	8.37	
8145	Rbm4b_2	-1.14	102	26.23	118	22.96	
8146	Bbs1	-1.14	43	3.56	48	3.12	
8147	RGD1561277	-1.14	52	3.04	57	2.66	
8148	Nit1	-1.14	117	23.07	125	20.19	
8149	RGD735029	-1.14	97	13.26	116	11.61	
8150	Ndst1	-1.14	322	27.83	389	24.35	
8151	lpo4	-1.14	240	21.72	269	19.01	
8152	Eif1b	-1.14	49	18.46	61	16.15	
8153	Alkbh1	-1.14	126	8.81	150	7.7	
8154	LOC361635	-1.14	335	33.65	422	29.43	
8155	Unc45a	-1.14	220	21.93	247	19.18	
8156	Eif4ebp2	-1.14	232	42.65	282	37.3	
8157	Spen	-1.14	331	9.4	401	8.22	
8158	Lonp1	-1.14	227	25.98	263	22.72	
8159	Dync2h1	-1.14	165	4.63	199	4.05	
8160	AABR07073038.1	-1.14	341	115.94	402	101.38	
8161	Il10rb	-1.14	77	11.83	85	10.35	
8162	Amz2	-1.14	137	14.54	169	12.71	
8163	Smchd1	-1.14	234	11	289	9.62	
8164	Samd8	-1.14	365	18.35	448	16.04	
8165	Riok1	-1.14	80	8.54	97	7.46	
8166	Uck1	-1.14	141	24.49	174	21.41	
8167	Calu	-1.14	1283	131.87	1523	115.26	
8168	Sdc1	-1.14	304	35.65	360	31.16	
8169	Ndufb10	-1.14	78	40.82	94	35.67	
8170	Zbtb17	-1.14	124	12.42	142	10.85	
8171	Rbck1	-1.15	254	32.38	311	28.28	
8172	Med12l	-1.15	170	3.99	212	3.49	
8173	Fam3a	-1.15	161	24.04	214	20.99	
8174	Ccdc28a	-1.15	33	5.45	32	4.76	
8175	Fancg	-1.15	9	1.16	9	1.01	
8176	RGD1562953	-1.15	1	2.67	2	2.33	
8177	Tbcel	-1.15	173	12.24	231	10.68	
8178	AABR07027581.1	-1.15	225	7.99	325	6.97	
8179	AABR07069473.1	-1.15	14	1.44	26	1.26	
8180	Acad11	-1.15	136	10.43	174	9.1	
8181	Alpl	-1.15	9	0.89	10	0.78	
8182	Ankrd53	-1.15	32	1.13	54	0.98	
8183	Apoa1bp	-1.15	68	23.66	82	20.64	
8184	BC024978	-1.15	23	3.81	22	3.32	
8185	Cbwd1	-1.15	35	2.97	51	2.59	
8186	Ccdc101	-1.15	58	10.86	73	9.47	
8187	Ccdc163	-1.15	14	1.37	14	1.19	
8188	Cep19	-1.15	36	7.03	42	6.13	
8189	Ciz1	-1.15	197	11.61	240	10.12	
8190	Dlk1	-1.15	5	1.35	8	1.18	
8191	Dnajc17	-1.15	25	2.19	35	1.91	
8192	Dsn1	-1.15	76	6.05	95	5.28	
8193	Filip1	-1.15	13	0.34	12	0.3	
8194	Frmppd1	-1.15	6	0.49	8	0.43	
8195	Galnt16_2	-1.15	5	1.66	5	1.45	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8196	Hiat1_2	-1.15	0	1.17	0	1.02	
8197	Impa2	-1.15	8	1.24	12	1.08	
8198	Irf5	-1.15	11	0.92	19	0.81	
8199	Keap1	-1.15	108	9.62	127	8.39	
8200	Krt8	-1.15	18	3.78	22	3.3	
8201	LOC100125367	-1.15	10	2.21	13	1.93	
8202	LOC100911881	-1.15	0	4.33	0	3.78	
8203	LOC100912429	-1.15	0	5.32	0	4.64	
8204	Lpcat1	-1.15	73	6.02	97	5.25	
8205	Mcm6	-1.15	200	23.83	230	20.79	
8206	mrpl11	-1.15	29	10.55	34	9.2	
8207	Msh3	-1.15	95	5.1	124	4.45	
8208	Napb	-1.15	17	1.85	32	1.61	
8209	Nif31	-1.15	67	6.31	100	5.5	
8210	Nipal3	-1.15	22	2.98	19	2.6	
8211	Nkd2	-1.15	6	0.54	9	0.47	
8212	Nme7	-1.15	63	9.35	65	8.16	
8213	Nup107	-1.15	70	6.32	80	5.51	
8214	Parp10	-1.15	67	6.82	81	5.95	
8215	Rab3il1	-1.15	7	1.92	10	1.68	
8216	Rcbtb1	-1.15	137	7.38	216	6.44	
8217	S100a13	-1.15	10	4.49	21	3.91	
8218	Selm	-1.15	9	3.22	7	2.81	
8219	Serf1	-1.15	10	4.73	12	4.13	
8220	Spag8	-1.15	8	1.21	8	1.06	
8221	Twist1	-1.15	24	5.4	29	4.71	
8222	Usp2	-1.15	7	0.85	8	0.74	
8223	Zswim5	-1.15	55	3.5	76	3.05	
8224	AABR07050407.1	-1.15	1	1.2	2	1.05	
8225	Cd109	-1.15	7	0.41	9	0.36	
8226	Gal3st4	-1.15	8	0.98	9	0.86	
8227	Glrx	-1.15	13	3.39	21	2.96	
8228	Kat2a	-1.15	163	17.75	181	15.49	
8229	Kcnk12	-1.15	124	4.6	156	4.01	
8230	LOC685520	-1.15	0	2.64	0	2.3	
8231	Sfmbt2	-1.15	17	0.83	23	0.73	
8232	Sgol2	-1.15	9	0.56	7	0.48	
8233	Tango6	-1.15	98	4.8	123	4.19	
8234	Mt-atp8	-1.15	1634	2956.9	1918	2578.2	
8235	Atxn10	-1.15	646	116.22	808	101.33	
8236	Zfp629	-1.15	577	12.03	736	10.49	
8237	Rps3a	-1.15	101	119.15	173	103.85	
8238	Bnc2	-1.15	353	11.43	449	9.96	
8239	Prkrir	-1.15	212	22.89	252	19.93	
8240	Il17ra	-1.15	106	9.7	141	8.45	
8241	Traf2	-1.15	122	16.97	138	14.78	
8242	Cog2	-1.15	145	17.03	191	14.82	
8243	Eif3i-ps1	-1.15	108	47.1	134	40.99	
8244	Jmy	-1.15	95	7.59	103	6.6	
8245	Fbxl6	-1.15	68	11.6	78	10.09	
8246	Flrt3	-1.15	1257	97.08	1562	84.45	
8247	Senp3	-1.15	186	25.28	214	21.99	
8248	Uggt1	-1.15	655	24.62	774	21.41	
8249	Ndufb11	-1.15	98	41.79	117	36.35	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8250	Dennd5b	-1.15	183	11.35	237	9.87	
8251	Tmx1	-1.15	256	44.74	319	38.9	
8252	Neo1	-1.15	614	41.76	701	36.31	
8253	Epha7	-1.15	70	5.19	83	4.52	
8254	Retsat	-1.15	182	27.04	224	23.5	
8255	Ivns1abp	-1.15	3281	256.87	3755	223.27	
8256	Dph1	-1.15	48	12.67	89	11.01	
8257	Zfp865_2	-1.15	79	9.11	93	7.92	
8258	Vwa5a_2	-1.15	4	9.45	2	8.21	
8259	Gabarap	-1.15	275	119.37	321	103.73	
8260	Snap47	-1.15	64	7.58	89	6.58	
8261	Lrpap1	-1.15	450	51.27	514	44.54	
8262	Stk16	-1.15	74	16.64	89	14.45	
8263	Ebna1bp2	-1.15	1	27.62	1	23.98	
8264	E2f1	-1.15	92	2.49	306	2.16	
8265	Nde1	-1.15	79	10.43	87	9.05	
8266	Slc2a13	-1.15	50	1.8	75	1.57	
8267	Ptchd1	-1.15	36	1.74	53	1.51	
8268	E2f4	-1.15	104	15.59	118	13.53	
8269	Pigq	-1.15	162	17.25	192	14.97	
8270	Mcrs1	-1.15	206	38.26	258	33.21	
8271	Cwf19l1	-1.15	89	8.78	100	7.62	
8272	Hexim1	-1.15	112	19.21	130	16.67	
8273	Sin3a	-1.15	402	28.48	473	24.71	
8274	Abhd12	-1.15	109	18.59	129	16.12	
8275	Armc9	-1.15	242	13.33	315	11.56	
8276	Inpp5a	-1.15	123	9.57	146	8.3	
8277	Mark2	-1.15	220	14.96	273	12.97	
8278	Ppil3	-1.15	35	8.81	39	7.64	
8279	Trove2	-1.15	15	2.44	20	2.11	
8280	Wfdc2	-1.15	42	12.38	55	10.74	
8281	Rpgrip1l	-1.15	77	2.56	97	2.22	
8282	Med25	-1.15	358	49.63	407	43.04	
8283	Dcaf7	-1.15	325	20.37	382	17.66	
8284	Ccnt1	-1.15	27	12.54	31	10.87	
8285	Tram1	-1.15	440	45.91	506	39.79	
8286	Usp24	-1.15	787	23.85	926	20.67	
8287	Poldip3	-1.15	352	30.81	439	26.7	
8288	Trappc13	-1.15	219	32.58	269	28.23	
8289	Kdm6b	-1.15	202	17.88	239	15.49	
8290	Ccng2	-1.15	193	25.79	225	22.35	
8291	Erh	-1.15	139	61.59	171	53.37	
8292	Pml	-1.15	149	15.85	201	13.73	
8293	Ssbp3	-1.15	510	67.33	664	58.34	
8294	Wdr74	-1.15	49	9.73	63	8.43	
8295	Zbtb7a	-1.15	102	11.27	132	9.77	
8296	Tlr3	-1.15	117	8.67	132	7.51	
8297	Ndufb6	-1.15	58	36.26	61	31.42	
8298	LOC498369	-1.15	399	31.73	482	27.49	
8299	C1r	-1.15	532	69.28	617	60	
8300	Hmcn1	-1.15	411	6.62	479	5.74	
8301	Acat2	-1.16	155	26.95	196	23.33	
8302	Mmp24	-1.16	19	1.69	24	1.47	
8303	LOC100362620	-1.16	18	11.19	27	9.68	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8304	Mroh1	-1.16	186	9.86	240	8.53	
8305	Rnf187	-1.16	250	45	292	38.94	
8306	Pa2g4	-1.16	220	49.66	263	42.97	
8307	Ttc13	-1.16	288	24.66	353	21.34	
8308	Ttf2	-1.16	109	6.7	116	5.8	
8309	Phf10	-1.16	235	30.83	296	26.67	
8310	Sharpin	-1.16	76	15.45	95	13.37	
8311	Bfar	-1.16	258	18.8	306	16.26	
8312	Tomm20	-1.16	170	56.53	196	48.89	
8313	Ap1s1	-1.16	167	39.6	192	34.24	
8314	Ppib	-1.16	597	215.02	692	185.89	
8315	Asl	-1.16	52	12.95	57	11.2	
8316	Fbln5	-1.16	214	29.89	271	25.84	
8317	Dock6	-1.16	54	2.35	64	2.03	
8318	Ggt7	-1.16	51	6.11	63	5.28	
8319	Rabggtb	-1.16	153	24.57	174	21.23	
8320	Tbc1d17	-1.16	150	20.92	173	18.08	
8321	Cog1	-1.16	142	15.6	169	13.47	
8322	Pik3cd	-1.16	1194	80.54	1463	69.54	
8323	Cdr2l	-1.16	117	8.9	124	7.68	
8324	Fam222a	-1.16	123	16.83	139	14.53	
8325	Ptprf	-1.16	839	39.03	975	33.7	
8326	Spint2	-1.16	495	111.58	584	96.31	
8327	Gsk3a	-1.16	297	43.46	359	37.5	
8328	AABR07048308.1	-1.16	7	15.23	6	13.14	
8329	Cep41	-1.16	16	1.32	23	1.14	
8330	Mtrr	-1.16	72	6.4	96	5.52	
8331	Pla2r1	-1.16	32	1.48	36	1.27	
8332	RGD1563680	-1.16	62	1.75	74	1.51	
8333	Slc25a33	-1.16	64	10.21	86	8.81	
8334	St7l	-1.16	133	4.54	168	3.92	
8335	Tbc1d22a	-1.16	54	12.65	80	10.91	
8336	AABR07069454.1	-1.16	14	2.1	15	1.81	
8337	Camk1d	-1.16	82	3.18	86	2.74	
8338	Efna4	-1.16	37	6.22	40	5.36	
8339	Marveld2	-1.16	17	1.69	22	1.46	
8340	Mterfd2	-1.16	42	10.87	47	9.38	
8341	Pfkfb4_1	-1.16	9	4.6	11	3.97	
8342	Sts	-1.16	15	1.82	18	1.57	
8343	Styl1	-1.16	47	2.87	66	2.48	
8344	Ube2v2	-1.16	65	5.75	76	4.96	
8345	Ube4b	-1.16	356	19.24	441	16.6	
8346	Wdhd1	-1.16	65	4.47	89	3.85	
8347	Trappc11	-1.16	160	10.89	203	9.39	
8348	Selenbp1_2	-1.16	0	39.97	0	34.46	
8349	Atp5a1	-1.16	1454	283.32	1679	244.25	
8350	Manf	-1.16	273	114.97	313	99.1	
8351	Tbc1d20	-1.16	273	57.02	345	49.15	
8352	Magi3	-1.16	115	4.44	161	3.83	
8353	Slc35a2	-1.16	88	13	105	11.2	
8354	Cry1	-1.16	187	23.54	227	20.29	
8355	Galk1	-1.16	44	16.13	52	13.9	
8356	Minos1	-1.16	179	84.6	229	72.9	
8357	Mcm3ap	-1.16	308	15.08	344	12.99	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8358	Vgll4	-1.16	182	29.63	248	25.53	
8359	Mrpl44	-1.16	47	10.8	60	9.3	
8360	Igfbp1	-1.16	97	6.59	107	5.67	
8361	Ndor1	-1.16	53	6.7	69	5.77	
8362	Tra2a	-1.16	562	35.88	748	30.9	
8363	Tor1aip1	-1.16	243	23.52	275	20.26	
8364	Gpx7	-1.16	367	110.64	427	95.26	
8365	Mettl5	-1.16	51	11.05	58	9.52	
8366	Ripk2	-1.16	46	3.27	54	2.81	
8367	Tmem98	-1.16	231	54.32	276	46.76	
8368	Samm50	-1.16	139	25.66	174	22.09	
8369	Abca3	-1.16	477	24.4	574	20.99	
8370	Sephs1	-1.16	218	10.98	260	9.44	
8371	Vps33a	-1.16	65	5.99	70	5.16	
8372	Grina	-1.16	631	128.65	728	110.69	
8373	Pcid2	-1.16	99	11.18	111	9.62	
8374	Pdzrn3	-1.16	919	31.02	1091	26.68	
8375	Tmem55b	-1.16	95	20.63	120	17.75	
8376	Ddx49	-1.16	132	24.25	170	20.86	
8377	Gpc4	-1.16	660	78.4	779	67.41	
8378	B4galt2	-1.16	82	14.35	98	12.33	
8379	Gatsl2	-1.16	31	5.84	43	5.02	
8380	Sec61b	-1.16	89	51.54	96	44.31	
8381	AABR07002627.1	-1.16	87	11.32	88	9.74	
8382	Fbxw17	-1.16	62	7.83	65	6.73	
8383	Foxk1	-1.16	41	2.6	48	2.23	
8384	Gnptg	-1.16	50	12.38	59	10.64	
8385	Jak3	-1.16	14	1.83	12	1.57	
8386	RGD1310769	-1.16	69	12.91	77	11.1	
8387	Tgfb3	-1.16	403	20.78	493	17.87	
8388	Scap	-1.16	341	25.99	394	22.34	
8389	Morf4l2	-1.16	860	157.72	988	135.57	
8390	Abhd16a	-1.16	191	16.48	215	14.17	
8391	Ctdsp2	-1.16	136	61.31	161	52.69	
8392	Tgif1	-1.16	316	61.17	363	52.57	
8393	Gtf3c2	-1.16	307	23.4	378	20.11	
8394	Arl8a	-1.16	136	24.18	173	20.77	
8395	Nelfb	-1.16	275	32.44	332	27.87	
8396	5_8S_rRNA_16	-1.16	0	1240.03	0	1065.1	
8397	Pigm	-1.16	74	7.25	85	6.22	
8398	Ctu1	-1.16	27	4.35	31	3.74	
8399	Klhdc10	-1.16	313	16.73	364	14.36	
8400	Klhl18	-1.16	71	5.45	69	4.68	
8401	Nup210	-1.16	29	1.41	35	1.21	
8402	Kcmf1	-1.16	175	32.61	213	27.99	
8403	Kif4a	-1.16	26	2.07	40	1.78	
8404	Pthr2	-1.16	63	6.88	69	5.91	
8405	Hdac1l_1	-1.17	213	45.03	244	38.65	
8406	Aif1l	-1.17	553	60.62	623	52.02	
8407	Gna12	-1.17	14	7.36	15	6.31	
8408	LOC100911693	-1.17	0	2.58	0	2.21	
8409	MGC94199_2	-1.17	0	6.1	0	5.23	
8410	Nmral1	-1.17	39	10.12	43	8.67	
8411	Tfe3	-1.17	78	14.3	91	12.26	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8412	RGD1563365	-1.17	34	10.35	40	8.88	
8413	Mlst8	-1.17	100	14.38	114	12.33	
8414	Zkscan1	-1.17	163	17.31	187	14.84	
8415	Tp53bp1	-1.17	331	16.1	396	13.8	
8416	CommD7	-1.17	51	15.51	63	13.29	
8417	Fam216a	-1.17	52	11.99	61	10.28	
8418	Yif1b_2	-1.17	0	7.42	0	6.36	
8419	Fars2	-1.17	127	7.66	153	6.57	
8420	Asb6	-1.17	68	10.38	72	8.89	
8421	Vps37b	-1.17	88	8.91	108	7.63	
8422	Fbxo34	-1.17	114	7.52	119	6.44	
8423	Nup205	-1.17	188	9.65	214	8.26	
8424	Tex264	-1.17	133	24.42	173	20.89	
8425	Atp6v1d	-1.17	123	31.06	135	26.57	
8426	Prmt5	-1.17	151	20.7	172	17.7	
8427	Rnf10	-1.17	1244	104.38	1428	89.26	
8428	Jade2	-1.17	212	18.22	235	15.58	
8429	Cmip	-1.17	342	14.11	480	12.07	
8430	Fto	-1.17	414	21.34	517	18.25	
8431	Carkd	-1.17	83	11.55	102	9.87	
8432	Chd1l	-1.17	56	5.61	66	4.79	
8433	Cyba	-1.17	9	3.3	14	2.82	
8434	Cyp2j4	-1.17	7	1.31	12	1.12	
8435	Dph5	-1.17	20	3.29	24	2.81	
8436	Pbk	-1.17	18	2.77	21	2.37	
8437	Pcyt1b	-1.17	11	1.09	19	0.94	
8438	Rangrf	-1.17	38	9.08	32	7.76	
8439	Robo1	-1.17	143	5.65	174	4.83	
8440	Rrp36	-1.17	27	10.39	32	8.88	
8441	Rundc1	-1.17	54	8.23	71	7.03	
8442	Sez6l	-1.17	15	0.53	10	0.45	
8443	Taco1	-1.17	18	3.37	20	2.88	
8444	Tbc1d32	-1.17	38	1.3	46	1.11	
8445	Tbrg4	-1.17	82	10.98	102	9.38	
8446	Zfp382	-1.17	74	2.4	111	2.05	
8447	Accsl	-1.17	7	1.17	9	1	
8448	Actg2	-1.17	15	3.57	16	3.05	
8449	Asnsd1	-1.17	98	16.64	116	14.21	
8450	Btbd8_2	-1.17	10	4.47	15	3.82	
8451	C1galt1c1	-1.17	71	17.37	88	14.84	
8452	Ccdc32	-1.17	46	5.37	54	4.58	
8453	Ddx51	-1.17	59	6.52	60	5.57	
8454	Fam134a	-1.17	222	28.3	258	24.18	
8455	Fam181b	-1.17	83	22.13	82	18.91	
8456	Fkbp7	-1.17	87	8.82	96	7.54	
8457	Kcnmb4	-1.17	48	10.55	69	9.02	
8458	Kctd17	-1.17	118	10.86	124	9.28	
8459	Ndfip2	-1.17	148	22.82	170	19.5	
8460	Ngly1	-1.17	121	11.37	190	9.72	
8461	Nuak1	-1.17	23	0.94	27	0.8	
8462	Pemt	-1.17	29	5.7	39	4.87	
8463	RGD1564447	-1.17	265	124.81	322	106.64	
8464	RT1-M3-1	-1.17	42	8.57	43	7.32	
8465	Tm2d1	-1.17	109	12.48	150	10.66	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8466	Trap1	-1.17	265	38.56	300	32.94	
8467	Ulk3	-1.17	23	4.4	33	3.76	
8468	Wdr61	-1.17	76	13.45	94	11.5	
8469	Lrrc59	-1.17	388	49.88	456	42.6	
8470	Sec61a1	-1.17	596	69.62	694	59.46	
8471	Zfp532	-1.17	356	14.03	443	11.98	
8472	P4hb	-1.17	1835	264.9	2099	226.21	
8473	Mapkapk2	-1.17	596	78.69	712	67.19	
8474	Smim15	-1.17	92	13.31	108	11.36	
8475	Ip6k1	-1.17	267	51.72	328	44.12	
8476	Timmcd1	-1.17	81	15.54	101	13.25	
8477	Slc12a4	-1.17	571	47.84	675	40.78	
8478	Cdc42bpb	-1.17	568	26.41	662	22.52	
8479	Dhx38	-1.17	207	16.36	240	13.94	
8480	Usp10	-1.17	233	21.45	281	18.28	
8481	Nsfl1c	-1.17	292	58.21	343	49.6	
8482	Gns_2	-1.17	211	46.94	262	39.99	
8483	RGD1563861	-1.17	1085	564.16	1219	480.52	
8484	Ifih1	-1.17	37	3.34	47	2.85	
8485	Tf	-1.17	87	7.97	107	6.79	
8486	Psmid11	-1.17	347	32.05	383	27.28	
8487	Bdh1	-1.18	152	15.05	190	12.81	
8488	Abcd4	-1.18	48	4.47	51	3.8	
8489	Ippk	-1.18	48	3.53	54	3	
8490	Nudt12	-1.18	33	2.7	38	2.3	
8491	Pitrm1	-1.18	340	32.73	410	27.85	
8492	Npat	-1.18	179	8.14	216	6.92	
8493	Nkiras2	-1.18	80	12.98	91	11.04	
8494	Agfg2	-1.18	74	6.35	112	5.4	
8495	Src	-1.18	196	19.58	230	16.64	
8496	RGD1310712	-1.18	179	13.01	211	11.06	
8497	Lmf2	-1.18	162	21.48	190	18.25	
8498	Erc6l	-1.18	22	2.01	27	1.71	
8499	Zfp606	-1.18	35	3.25	43	2.76	
8500	Gsto1	-1.18	40	29.07	51	24.7	
8501	Mkx	-1.18	27	5.99	39	5.09	
8502	Ranbp6	-1.18	65	7.2	75	6.12	
8503	Vsig10l	-1.18	23	3.45	27	2.93	
8504	Wrb	-1.18	147	21.29	183	18.08	
8505	Pcdh11x	-1.18	133	4.8	134	4.08	
8506	Me2	-1.18	589	61.86	687	52.52	
8507	Ndufb2	-1.18	67	46.85	77	39.77	
8508	Rassf1	-1.18	89	10.92	122	9.27	
8509	Ssx2ip	-1.18	52	6.1	66	5.18	
8510	Tsku	-1.18	63	8.3	78	7.05	
8511	Tspan13	-1.18	71	11.01	74	9.34	
8512	Usp27x	-1.18	59	11.36	66	9.64	
8513	Nfkb1	-1.18	299	23.51	368	19.96	
8514	Tpi1	-1.18	7	131.64	5	111.73	
8515	Dpf2	-1.18	343	46.28	399	39.28	
8516	Ngfrap1	-1.18	1463	678.29	1688	575.66	
8517	Nr2f6	-1.18	62	7.65	60	6.49	
8518	Ppp2cb	-1.18	418	84.52	495	71.73	
8519	Sf3b4	-1.18	247	55.98	290	47.5	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8520	Dynll2	-1.18	186	27.74	212	23.54	
8521	Rspry1	-1.18	115	14.11	137	11.98	
8522	AABR07002623.2	-1.18	28	27.98	37	23.73	
8523	Pbx3	-1.18	78	6.7	89	5.68	
8524	Wdr19	-1.18	65	4.36	78	3.7	
8525	Bahcc1	-1.18	128	5.52	154	4.68	
8526	Ppp3r1	-1.18	33	27.52	39	23.34	
8527	Gemin5	-1.18	163	9.69	186	8.22	
8528	Ints9	-1.18	128	13.79	159	11.7	
8529	Smyd2	-1.18	147	22.3	164	18.91	
8530	Ccdc12	-1.18	68	20.04	93	16.98	
8531	Crybg3	-1.18	50	2.92	54	2.47	
8532	Hspbap1	-1.18	112	3.67	150	3.11	
8533	LOC688459	-1.18	31	8.32	39	7.05	
8534	Med8	-1.18	16	8.38	17	7.1	
8535	Slc37a2	-1.18	20	1.18	24	1	
8536	Sumo2l	-1.18	10	5.46	12	4.63	
8537	Susd4	-1.18	82	5.51	96	4.67	
8538	Tmem39b	-1.18	87	10.03	104	8.5	
8539	Tonsl	-1.18	17	1.28	22	1.08	
8540	Gpc2	-1.18	27	2.08	34	1.76	
8541	Mycbp	-1.18	50	10.61	68	8.99	
8542	Zfp330	-1.18	71	9.04	85	7.66	
8543	LOC100911730	-1.18	15	88.2	17	74.68	
8544	Uggt2	-1.18	194	11.43	241	9.68	
8545	Smap1	-1.18	232	31.4	261	26.58	
8546	Gtf3c6	-1.18	56	12.3	74	10.41	
8547	Stard4	-1.18	58	7.17	66	6.07	
8548	Vcp	-1.18	1312	147.71	1501	125.01	
8549	Emc1	-1.18	331	18.55	364	15.7	
8550	Bop1	-1.18	96	13.29	110	11.25	
8551	Crtc2	-1.18	148	18.01	169	15.24	
8552	Ipo13	-1.18	144	13.08	166	11.06	
8553	Ptpn2	-1.18	113	9.49	131	8.03	
8554	Sqle	-1.18	188	23.24	234	19.66	
8555	5_8S_rRNA_13	-1.18	0	1261.32	0	1066.8	
8556	H2afy	-1.18	606	65.11	753	55.04	
8557	Ube2z	-1.18	273	32.96	320	27.87	
8558	Gcn1l1	-1.18	852	34.33	995	29.02	
8559	Ilkap	-1.18	177	24.67	249	20.85	
8560	LOC100359600	-1.18	6	4.21	8	3.56	
8561	Tdp1	-1.18	30	3.24	36	2.74	
8562	Trex1	-1.18	23	8.17	27	6.91	
8563	Ptma_1	-1.18	696	480.58	664	406.04	
8564	Arpc1a	-1.18	202	37.32	237	31.53	
8565	Nup93	-1.18	178	17.63	198	14.89	
8566	Bzw2	-1.18	972	132.25	1113	111.7	
8567	Eya1	-1.18	143	10.86	176	9.17	
8568	Zc3h12c	-1.18	67	6.49	84	5.48	
8569	Rhoq	-1.18	236	18.11	303	15.29	
8570	Cnrip1	-1.18	34	6.8	26	5.74	
8571	Nup43	-1.18	40	6.09	51	5.14	
8572	Xpo1	-1.18	396	29.5	440	24.9	
8573	Ano10	-1.19	91	10.58	121	8.93	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8574	Plscr3	-1.19	180	37.12	213	31.32	
8575	Man2b2	-1.19	49	19.77	44	16.68	
8576	AC109958.1	-1.19	19	15.09	22	12.72	
8577	Ppp2ca	-1.19	76	60.73	78	51.23	
8578	Cacnb2	-1.19	136	6.19	257	5.22	
8579	Slc39a7	-1.19	510	78.28	581	66.03	
8580	Arl2bp	-1.19	311	50.9	358	42.93	
8581	Ctnnb1	-1.19	1190	176.44	1340	148.81	
8582	RGD1310127	-1.19	84	17.73	107	14.95	
8583	Sptlc1	-1.19	160	10.26	197	8.65	
8584	Dap	-1.19	648	119.25	781	100.55	
8585	Arl5a	-1.19	172	17.96	239	15.14	
8586	Nipsnap3b	-1.19	49	14.75	62	12.43	
8587	Tom1	-1.19	112	15.03	135	12.67	
8588	AC135696.1	-1.19	18	7.66	25	6.46	
8589	Uqcrc1	-1.19	324	68.6	366	57.83	
8590	Rnf114	-1.19	174	26.54	203	22.37	
8591	Farsb	-1.19	128	19.21	154	16.19	
8592	Eef1g	-1.19	1304	396.85	1394	334.34	
8593	Usp14	-1.19	175	22.52	190	18.98	
8594	Eif4ebp1	-1.19	161	60.84	174	51.26	
8595	Ing1	-1.19	71	13.92	80	11.72	
8596	Rpl34-ps1	-1.19	60	66.99	76	56.42	
8597	Coro7	-1.19	92	9.57	113	8.06	
8598	Mt-co1	-1.19	25345	5982.22	28651	5037.8	
8599	Ifitm2	-1.19	314	177.48	353	149.43	
8600	Chd3	-1.19	854	42.72	959	35.96	
8601	Rpsa	-1.19	1240	542.57	1354	456.74	
8602	Rnf123	-1.19	137	13.63	145	11.47	
8603	AC103179.2	-1.19	8	1.21	9	1.02	
8604	B9d2	-1.19	19	2.37	15	2	
8605	Cstb	-1.19	169	95.04	188	79.94	
8606	Gem	-1.19	96	19.6	109	16.48	
8607	Glo1	-1.19	92	27.72	96	23.31	
8608	Mpc2	-1.19	53	30.17	67	25.38	
8609	Mthfsd	-1.19	20	2.65	21	2.22	
8610	Nog	-1.19	8	1.78	9	1.5	
8611	Pdcd2	-1.19	43	7.66	37	6.45	
8612	Pkhd11	-1.19	27	0.44	28	0.37	
8613	Plekhn1	-1.19	19	1.03	15	0.87	
8614	RGD1311575	-1.19	19	0.86	24	0.72	
8615	RGD1563072_2	-1.19	14	6.95	18	5.85	
8616	Swi5	-1.19	270	122.63	310	103.14	
8617	Tatdn3	-1.19	26	6.2	33	5.21	
8618	AC098459.1	-1.19	9	8.15	8	6.85	
8619	Alkbh6_2	-1.19	0	4.02	1	3.38	
8620	Ccdc125	-1.19	20	1.27	17	1.07	
8621	Cenpn	-1.19	48	3.16	49	2.66	
8622	Grhpr	-1.19	28	4.61	36	3.88	
8623	Homez	-1.19	24	3.29	23	2.77	
8624	Pgm1	-1.19	139	19.06	162	16.03	
8625	Pih1d2	-1.19	13	2.22	19	1.87	
8626	Prg4	-1.19	12	0.91	12	0.77	
8627	Prss36	-1.19	9	1.05	15	0.88	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8628	S100a16	-1.19	8	2.51	9	2.11	
8629	Stard8	-1.19	10	0.52	10	0.44	
8630	Vom2r6	-1.19	28	3.44	23	2.89	
8631	Zfp759	-1.19	43	1.12	63	0.94	
8632	Pttg1ip	-1.19	751	102.8	863	86.44	
8633	Eif4g2	-1.19	2143	291.88	2121	245.35	
8634	Mlit1	-1.19	175	14.89	201	12.51	
8635	Cyp51	-1.19	475	49.74	540	41.81	
8636	LOC100362149	-1.19	272	371.43	127	312.13	
8637	Stt3a	-1.19	642	26.34	729	22.12	
8638	Gcdh	-1.19	88	14.1	86	11.84	
8639	Fam160b1	-1.19	172	20.53	199	17.24	
8640	Rab11b	-1.19	441	81.2	525	68.17	
8641	Fam13a	-1.19	179	14.44	216	12.12	
8642	Pik3c2b	-1.19	64	1.95	68	1.63	
8643	Ywhag	-1.19	1054	105.96	1184	88.9	
8644	R3hcc1	-1.19	96	16.66	110	13.98	
8645	Uqcrb	-1.19	31	14.43	38	12.1	
8646	Zdhhc16	-1.19	111	16.45	119	13.8	
8647	Atp5g1	-1.19	78	52.92	78	44.39	
8648	Vars2	-1.19	89	6.95	96	5.83	
8649	Glg1	-1.19	1332	57.84	1511	48.51	
8650	Lsm12	-1.19	251	37.28	297	31.26	
8651	Tmem55a	-1.19	154	17.3	210	14.5	
8652	Oxa1l	-1.19	369	52.17	429	43.73	
8653	Hp	-1.19	38	10.13	42	8.49	
8654	Ackr3	-1.19	171	29.36	200	24.61	
8655	Gng10	-1.19	193	61.47	224	51.51	
8656	Zfp523	-1.19	105	13.08	132	10.96	
8657	Arl6ip1	-1.19	276	44.71	313	37.46	
8658	Rnf181	-1.19	202	33.84	225	28.35	
8659	Qars	-1.19	399	49.95	439	41.84	
8660	Sars2	-1.19	34	3.72	35	3.11	
8661	AC141516.3	-1.19	8	18.03	8	15.1	
8662	Aven	-1.19	37	8.55	45	7.16	
8663	RT1-CE4	-1.19	17	3.95	26	3.31	
8664	SNORD47_2	-1.19	95	464.19	110	388.69	
8665	Psmc1	-1.19	280	59.9	312	50.15	
8666	Lrp5	-1.19	463	29.8	536	24.95	
8667	Serpine2	-1.19	1571	252.57	1787	211.41	
8668	Pfcp	-1.19	781	95.59	881	80	
8669	Ahcy	-1.19	198	35.43	220	29.65	
8670	Cnp	-1.19	241	38.24	276	32	
8671	Tufm	-1.2	170	32.29	194	27.01	
8672	Zfp426	-1.2	50	5.57	54	4.66	
8673	Eif3f	-1.2	427	114.6	485	95.87	
8674	Ncor2	-1.2	650	22.62	720	18.93	
8675	Txnl4b	-1.2	43	8.92	55	7.47	
8676	Mia3	-1.2	377	27.98	475	23.4	
8677	Narfl	-1.2	62	7.93	75	6.63	
8678	Tmem101	-1.2	61	12.6	62	10.54	
8679	Txndc11	-1.2	180	15.91	230	13.3	
8680	Rtcd1	-1.2	123	21.77	148	18.2	
8681	Hmgxb4	-1.2	140	8.26	184	6.9	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8682	Ctbp1	-1.2	637	97.98	726	81.91	
8683	AABR07010563.1	-1.2	38	16.48	40	13.77	
8684	Brk1	-1.2	164	39.1	228	32.67	
8685	Chchd5	-1.2	36	8.15	40	6.81	
8686	Dmap1	-1.2	53	11.81	66	9.87	
8687	Hspb6	-1.2	20	4.7	21	3.93	
8688	Ppara	-1.2	43	2.89	43	2.42	
8689	Rcor1_2	-1.2	136	16.37	152	13.68	
8690	Rpn2	-1.2	794	108.37	895	90.55	
8691	Ubald2	-1.2	16	12.51	24	10.45	
8692	Xrcc6bp1	-1.2	29	5.69	29	4.76	
8693	Gipc1	-1.2	149	22.68	182	18.96	
8694	Nudcd2	-1.2	52	11.77	57	9.83	
8695	Tmem30a	-1.2	268	48.06	319	40.15	
8696	Napa	-1.2	213	46.17	262	38.57	
8697	Plod3	-1.2	360	47.13	402	39.37	
8698	Brd2	-1.2	35	40.39	25	33.73	
8699	Degs1	-1.2	219	53.92	234	45.02	
8700	Psmb1	-1.2	290	87.13	334	72.74	
8701	Ephb6	-1.2	189	16.03	211	13.38	
8702	mrpl9	-1.2	67	14.08	81	11.75	
8703	Rnf149	-1.2	111	18.33	147	15.3	
8704	Arhgef2	-1.2	319	23.07	382	19.26	
8705	Hmgn2	-1.2	306	124.33	355	103.77	
8706	Scamp4	-1.2	209	36.1	238	30.13	
8707	Fam111a	-1.2	44	4.88	50	4.07	
8708	Gramd1a	-1.2	290	25.74	335	21.48	
8709	Vdac2	-1.2	481	89.94	552	75.02	
8710	Akr1a1	-1.2	811	227.41	927	189.68	
8711	Mutyh	-1.2	45	5.64	41	4.71	
8712	Spidr	-1.2	98	6.1	122	5.09	
8713	Bmi1	-1.2	29	8.37	31	6.98	
8714	Rab8b	-1.2	97	6.39	120	5.33	
8715	Repin1	-1.2	53	8.39	58	7	
8716	Polr3c	-1.2	113	13.32	133	11.1	
8717	Prep	-1.2	304	31.05	333	25.88	
8718	Ppp1r16a	-1.2	73	8.4	83	7	
8719	Ndfip1	-1.2	540	92.32	599	76.93	
8720	Smoc1	-1.2	2778	388.77	3698	323.98	
8721	Acadsb	-1.2	66	6.21	86	5.17	
8722	Ogfod3	-1.2	40	9.64	46	8.03	
8723	Tymp	-1.2	90	10.78	110	8.98	
8724	Bloc1s5	-1.2	45	7.11	55	5.92	
8725	Smpd4	-1.2	137	11.96	149	9.96	
8726	Hm13	-1.2	475	49.37	600	41.11	
8727	Smarcb1	-1.2	386	33.45	425	27.85	
8728	Mapk1	-1.2	294	43.32	410	36.07	
8729	Spsb1	-1.2	1030	116.29	1185	96.81	
8730	Mief1	-1.2	122	16.54	143	13.76	
8731	Slc48a1	-1.2	107	22.66	123	18.86	
8732	Ncoa5	-1.2	222	16.97	280	14.12	
8733	Stim1	-1.2	188	13.87	223	11.54	
8734	Wbp11_2	-1.2	0	7.73	0	6.44	
8735	Tmem115	-1.2	109	17.53	120	14.59	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8736	Decr2	-1.2	93	6.45	108	5.36	
8737	Cul4a	-1.2	582	37.41	649	31.11	
8738	Slc25a3	-1.2	474	106.98	566	88.95	
8739	Ddx41	-1.2	153	30.04	153	24.97	
8740	Git1	-1.2	377	42.45	426	35.29	
8741	Leprotl1	-1.2	228	27.37	255	22.75	
8742	Tp53i11	-1.2	308	38.3	340	31.83	
8743	Rrp9	-1.2	54	10.23	54	8.5	
8744	AABR07031734.2	-1.2	9	1.36	10	1.13	
8745	Acot2	-1.2	24	4.12	18	3.42	
8746	Arrb2	-1.2	59	13.36	49	11.1	
8747	Cdhr2	-1.2	11	0.83	10	0.69	
8748	Dok1	-1.2	9	1.89	10	1.57	
8749	Gnat1	-1.2	9	1.5	10	1.25	
8750	LOC100359825	-1.2	1	9.79	0	8.13	
8751	Mblac1	-1.2	9	2.58	10	2.14	
8752	Nipsnap1	-1.2	170	17.3	190	14.37	
8753	Rab7b	-1.2	45	5.05	60	4.19	
8754	Rnf215	-1.2	95	11.77	106	9.78	
8755	Slc25a25	-1.2	50	5.2	51	4.32	
8756	Fam174a	-1.2	61	14.17	68	11.77	
8757	Ifi44	-1.2	62	4.44	74	3.69	
8758	LOC100909856	-1.2	7	4.3	3	3.58	
8759	Mrpl34	-1.2	36	22.83	40	18.96	
8760	Pcdhga5	-1.2	9	1.34	10	1.12	
8761	Snopc1	-1.2	45	7.39	57	6.14	
8762	Zswim8	-1.2	0	1.2	0	0.99	
8763	Epn1	-1.2	270	40.69	304	33.79	
8764	AABR07073181.1	-1.2	147	6.93	175	5.75	
8765	Hdac3	-1.2	158	27.36	178	22.71	
8766	Psmc14	-1.21	121	22.86	147	18.97	
8767	Snx3	-1.21	209	58.76	250	48.76	
8768	Arsa	-1.21	159	15.53	180	12.89	
8769	Mtfr1l	-1.21	164	28.7	180	23.81	
8770	Xab2	-1.21	145	17.77	164	14.74	
8771	Pan3	-1.21	423	28.01	493	23.23	
8772	Iffo1	-1.21	151	9.77	183	8.1	
8773	Fuk	-1.21	64	4.32	63	3.58	
8774	Ipp	-1.21	76	7.07	99	5.86	
8775	Ostm1	-1.21	95	23.12	109	19.16	
8776	Cnpy2	-1.21	148	46.8	156	38.79	
8777	Timp1	-1.21	75	58.71	78	48.65	
8778	Atp6v0a1	-1.21	926	62.56	1035	51.83	
8779	Ccdc124	-1.21	43	8.34	55	6.91	
8780	Scarb2	-1.21	618	92.29	728	76.44	
8781	Spats2	-1.21	27	9.03	30	7.48	
8782	Ift20	-1.21	67	20.9	82	17.31	
8783	Ppp1r9b	-1.21	165	12.69	183	10.51	
8784	Mrps35	-1.21	34	4.53	50	3.75	
8785	Tecpr1	-1.21	159	9.84	189	8.15	
8786	Col1a1	-1.21	56	3.48	62	2.88	
8787	Stat6	-1.21	113	17.01	139	14.08	
8788	Tnfsf10	-1.21	30	2.64	37	2.18	
8789	Ctbs	-1.21	71	23.08	95	19.1	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8790	Slc35a4	-1.21	245	35.61	270	29.46	
8791	Tmem97	-1.21	52	13.71	59	11.34	
8792	Derl1	-1.21	311	39.44	354	32.62	
8793	Atrn	-1.21	689	24.61	797	20.35	
8794	LOC679811	-1.21	246	14.43	336	11.94	
8795	Szt2	-1.21	244	7.01	268	5.79	
8796	Ints5	-1.21	103	11.5	114	9.51	
8797	Plekha3	-1.21	115	22.22	142	18.37	
8798	Zfp398	-1.21	80	5.97	106	4.93	
8799	C4b	-1.21	11	1.29	9	1.07	
8800	LOC681282	-1.21	23	10.28	24	8.5	
8801	Panx2	-1.21	33	2.36	31	1.95	
8802	Rnf185	-1.21	137	14.97	156	12.37	
8803	Zfp524	-1.21	19	6.56	21	5.42	
8804	Zfp866_1	-1.21	38	8.84	40	7.3	
8805	AABR07027870.1	-1.21	11	2.23	15	1.85	
8806	Atg4d	-1.21	70	10.64	78	8.8	
8807	Dpcd	-1.21	33	7.82	45	6.46	
8808	Ttc8	-1.21	102	11.68	119	9.65	
8809	Wdr82	-1.21	201	41.64	242	34.4	
8810	Gars	-1.21	522	72.93	595	60.24	
8811	Scrib	-1.21	368	21.21	422	17.52	
8812	St3gal5	-1.21	372	44.96	468	37.12	
8813	Stk11	-1.21	230	22.29	274	18.4	
8814	Abcf3	-1.21	110	13.79	128	11.38	
8815	Mapk8ip1	-1.21	97	11.62	108	9.59	
8816	Rab40c	-1.21	79	7.13	106	5.89	
8817	Fam21c	-1.21	523	40.07	600	33.07	
8818	Tspan14	-1.21	122	18.93	134	15.62	
8819	Zfp553	-1.21	104	17.69	117	14.6	
8820	Ckap4	-1.21	617	87.82	680	72.45	
8821	Ctu2	-1.21	32	5.43	32	4.48	
8822	Fry	-1.21	79	1.88	109	1.55	
8823	Hacl1	-1.21	43	1.8	55	1.49	
8824	Kifc1	-1.21	39	4.59	42	3.79	
8825	Mipep	-1.21	71	8.54	85	7.05	
8826	Prpf4	-1.21	99	12.13	112	10.01	
8827	Rpa3	-1.21	33	17.02	38	14.04	
8828	Traf4	-1.21	96	15.72	100	12.97	
8829	Slc35b4	-1.21	164	14.49	186	11.96	
8830	Clptm1l	-1.21	498	75.8	561	62.52	
8831	Dync1li1	-1.21	112	19.38	142	15.98	
8832	Ubl3	-1.21	258	31.3	290	25.81	
8833	AABR07029710.1	-1.21	2	10.62	0	8.75	
8834	Hps4	-1.21	102	8.47	106	6.99	
8835	Rangap1	-1.21	193	21.68	229	17.87	
8836	Klc4	-1.21	89	10.62	106	8.75	
8837	Smcr8	-1.21	169	16.43	199	13.55	
8838	Tbpl1	-1.21	84	11.27	107	9.29	
8839	Nhp2_2	-1.21	2	18.17	2	14.98	
8840	Anapc2	-1.21	423	52.67	485	43.4	
8841	Sphk2	-1.21	112	16.42	133	13.52	
8842	Gfpt2	-1.21	84	8.34	90	6.87	
8843	Med14	-1.21	452	29.92	509	24.63	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8844	Mgat2	-1.22	117	17.33	131	14.26	
8845	Rps5	-1.22	734	348.82	815	286.97	
8846	Adcy2	-1.22	22	1.13	35	0.93	
8847	Aurkc	-1.22	31	6.54	32	5.37	
8848	Brpf3	-1.22	223	11.48	249	9.44	
8849	Cndp2	-1.22	63	10.4	75	8.56	
8850	Cryab	-1.22	30	8.7	34	7.16	
8851	Dhrs13	-1.22	21	6.51	25	5.35	
8852	Gar1	-1.22	22	5.36	29	4.41	
8853	LOC100365556	-1.22	52	1.13	66	0.93	
8854	Mettl8	-1.22	32	1.17	51	0.96	
8855	Mpi	-1.22	66	11.94	74	9.82	
8856	Mrvi1	-1.22	12	0.59	23	0.48	
8857	Ndufa2	-1.22	40	25.86	44	21.27	
8858	Ndufc2	-1.22	64	32.33	68	26.59	
8859	Pdgfra	-1.22	11	0.56	12	0.46	
8860	Rad51ap1	-1.22	19	1.83	17	1.5	
8861	Tlr2	-1.22	10	1.4	11	1.15	
8862	AABR07034750.1	-1.22	1	0.67	2	0.55	
8863	ENSRNOG00000060	-1.22	68	1.46	98	1.2	
8864	Mad2l1bp	-1.22	20	3.91	24	3.21	
8865	Ndufb5	-1.22	98	27.27	122	22.43	
8866	Nol6	-1.22	211	14.34	238	11.79	
8867	Ramp1	-1.22	39	13.44	50	11.06	
8868	Rgs2	-1.22	167	66.74	184	54.89	
8869	Rnf13	-1.22	259	29.45	267	24.22	
8870	Kdm4a	-1.22	540	29.77	581	24.47	
8871	Ctnnb1	-1.22	171	21.33	185	17.53	
8872	Zfp862	-1.22	139	11.06	166	9.09	
8873	Slc41a1	-1.22	295	22.04	327	18.1	
8874	Atf7ip	-1.22	253	19.54	277	16.05	
8875	Gstt2	-1.22	90	18.7	95	15.36	
8876	Synm	-1.22	189	8.91	211	7.32	
8877	Mrps6	-1.22	353	26.42	673	21.69	
8878	Zfp347	-1.22	38	10.59	51	8.7	
8879	Foxo3	-1.22	125	11.57	156	9.49	
8880	Rasef	-1.22	55	6.08	60	4.99	
8881	lah1	-1.22	91	32.55	101	26.71	
8882	Bnip3	-1.22	105	25.29	117	20.75	
8883	Tef	-1.22	209	15.22	256	12.48	
8884	Elovl5	-1.22	370	114.79	419	94.15	
8885	Ern1	-1.22	239	10.78	283	8.85	
8886	G6pdx	-1.22	622	89.45	679	73.36	
8887	Sema4b	-1.22	572	52.95	619	43.42	
8888	Ifi35	-1.22	67	20.96	87	17.19	
8889	Tmco6	-1.22	42	6.09	44	5	
8890	Zmat1	-1.22	63	5.79	98	4.75	
8891	Nudt9	-1.22	39	8.06	45	6.61	
8892	Zfp777	-1.22	97	10.12	111	8.3	
8893	Ggcx	-1.22	226	18.55	263	15.21	
8894	Bet1	-1.22	60	12.42	74	10.18	
8895	Txnrd1	-1.22	258	23.12	319	18.94	
8896	Tubgcp2	-1.22	295	32.16	311	26.34	
8897	B3gnt2	-1.22	151	16.78	169	13.75	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8898	Lman2	-1.22	372	68.18	412	55.84	
8899	Atmin_1	-1.22	15	3.12	16	2.55	
8900	Hirip3	-1.22	46	6.93	52	5.68	
8901	LOC100911363	-1.22	0	73.01	0	59.78	
8902	Lysmd4	-1.22	30	5.77	29	4.72	
8903	Nlgn3	-1.22	24	1.91	25	1.57	
8904	RGD1563482	-1.22	45	2.11	59	1.73	
8905	Sh3bgrl3	-1.22	65	30.21	69	24.74	
8906	RragB_2	-1.22	0	1.93	0	1.58	
8907	Serac1	-1.22	36	4.1	47	3.36	
8908	Syvn1	-1.22	360	25.59	404	20.95	
8909	Rfx1	-1.22	125	8.28	136	6.77	
8910	Tyk2	-1.22	116	6.8	135	5.57	
8911	Smad3	-1.22	711	41.84	842	34.23	
8912	Bcap31	-1.22	203	54.27	255	44.4	
8913	LOC361985	-1.22	193	35.85	215	29.33	
8914	Nbl1	-1.22	274	53.45	308	43.73	
8915	Slc41a2	-1.22	69	4.29	87	3.51	
8916	Unc5b	-1.22	615	37.64	702	30.79	
8917	Dnal1	-1.22	151	4.06	175	3.32	
8918	RT1-CE16	-1.22	26	21.28	32	17.4	
8919	Atmin_2	-1.22	103	12.22	111	10	
8920	Mtg2	-1.22	117	12.69	148	10.38	
8921	Phactr4	-1.22	110	6.89	108	5.63	
8922	Polh	-1.22	43	3.64	53	2.98	
8923	Tmem186	-1.22	36	5.67	40	4.64	
8924	Tmem214	-1.22	211	19.65	228	16.06	
8925	R3hdm4	-1.22	89	33.42	76	27.32	
8926	Gosr2	-1.22	215	33.69	250	27.54	
8927	Bax	-1.22	43	12.19	57	9.96	
8928	Pkn1	-1.22	215	20.17	246	16.49	
8929	Pex26	-1.22	60	4.79	64	3.91	
8930	Cpsf3l	-1.22	87	9.86	107	8.06	
8931	Ermp1	-1.22	439	29.25	503	23.89	
8932	Xylt1	-1.22	268	30.06	279	24.55	
8933	RGD1311744	-1.22	96	8.77	103	7.16	
8934	Mbtps1	-1.23	760	57.63	869	47.04	
8935	Tex261	-1.23	124	41.66	139	34	
8936	Tspan3	-1.23	385	83.23	428	67.92	
8937	Pes1	-1.23	192	32.36	211	26.41	
8938	Dpp7	-1.23	218	44.17	241	36.04	
8939	Arid3a	-1.23	9	0.88	6	0.72	
8940	Cgrrf1	-1.23	51	6.02	67	4.91	
8941	Eid1	-1.23	0	4.63	0	3.78	
8942	Hells	-1.23	0	0.78	0	0.63	
8943	Kihl25	-1.23	103	9.73	125	7.93	
8944	Lmo7	-1.23	21	0.77	13	0.63	
8945	LOC100909688	-1.23	10	2.44	15	1.99	
8946	Ribc1	-1.23	22	2.8	24	2.29	
8947	Ssbp2	-1.23	206	21.23	298	17.31	
8948	Tmem121	-1.23	11	4.16	12	3.39	
8949	Cdk2ap2	-1.23	78	26.58	87	21.68	
8950	Cops7a	-1.23	193	29.85	223	24.34	
8951	Dnajc28	-1.23	11	2.82	12	2.3	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
8952	Guk1	-1.23	96	33.5	108	27.33	
8953	LOC100912455	-1.23	0	1.31	0	1.07	
8954	Med26	-1.23	61	3.1	73	2.53	
8955	Mlycd	-1.23	102	11.63	119	9.48	
8956	Sephs2	-1.23	68	10.34	76	8.43	
8957	Ptprs	-1.23	968	53.2	1063	43.38	
8958	M6pr	-1.23	271	73.97	289	60.3	
8959	Vipas39	-1.23	196	21.68	211	17.67	
8960	Dhx8	-1.23	158	11.54	190	9.4	
8961	LOC688176	-1.23	71	10.36	80	8.44	
8962	Ormdl2	-1.23	75	22.93	86	18.68	
8963	Tmbim6	-1.23	696	115.75	934	94.29	
8964	Rcan1	-1.23	66	9.4	67	7.66	
8965	Casd1	-1.23	77	8.51	94	6.93	
8966	Chst15	-1.23	157	10.43	168	8.5	
8967	Cdk16	-1.23	589	65.5	640	53.32	
8968	Mvb12b	-1.23	254	16.5	277	13.43	
8969	Acp6	-1.23	96	18.03	109	14.68	
8970	Eef2	-1.23	4399	546.39	4797	444.69	
8971	Zfp236	-1.23	136	6.99	178	5.69	
8972	Map3k12	-1.23	165	14.36	173	11.68	
8973	Iqgap2	-1.23	129	3.3	205	2.68	
8974	Pabpn1	-1.23	451	71.64	462	58.28	
8975	Gatb	-1.23	77	10.93	98	8.88	
8976	Spata6	-1.23	75	8.65	86	7.03	
8977	Itm2b	-1.23	4686	927.35	5304	754.08	
8978	Ptdss2	-1.23	230	18.32	269	14.89	
8979	Gpt2	-1.23	44	2.5	56	2.03	
8980	Dlgap1	-1.23	149	1.68	227	1.37	
8981	Faah_2	-1.23	8	2.33	12	1.89	
8982	LOC100361087	-1.23	66	3.49	101	2.84	
8983	AABR07036019.1	-1.23	27	2.47	26	2.01	
8984	Pitpnm1	-1.23	100	8	104	6.5	
8985	Tmem138	-1.23	27	5.35	35	4.35	
8986	Dgcr8	-1.23	172	11.09	217	9.01	
8987	Capns1	-1.23	0	42.42	0	34.45	
8988	Mief2	-1.23	62	11.16	69	9.06	
8989	Hif1a	-1.23	957	82.68	1050	67.11	
8990	LOC690251	-1.23	0	5.62	0	4.57	
8991	Stat5b	-1.23	122	14.22	158	11.54	
8992	Srsf5	-1.23	650	115.06	698	93.37	
8993	Zfp512b	-1.23	311	19.4	348	15.74	
8994	Szrd1	-1.23	375	36.6	444	29.69	
8995	Sumo3	-1.23	235	48.92	252	39.68	
8996	Mdm2	-1.23	198	20.39	242	16.54	
8997	Tbc1d30	-1.23	81	9.38	100	7.61	
8998	Apbb3	-1.23	78	10.65	87	8.63	
8999	Cdc42bpg	-1.23	75	4.31	81	3.49	
9000	Cops8	-1.23	152	35	174	28.38	
9001	Dcaf11	-1.23	181	19.52	209	15.83	
9002	LOC100910447	-1.23	136	43.58	160	35.32	
9003	Nus1	-1.23	151	14.21	173	11.51	
9004	Atp5c1	-1.23	431	16.48	485	13.35	
9005	Ccnd2	-1.23	829	177.71	892	143.96	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9006	AABR07062512.1	-1.23	17	2.92	24	2.36	
9007	Ankrd32	-1.23	44	2.32	50	1.88	
9008	Card14	-1.23	85	1.45	106	1.18	
9009	Csmd3	-1.23	36	0.47	39	0.38	
9010	Dennd6b	-1.23	37	3.26	40	2.64	
9011	Fam184a	-1.23	53	2.49	83	2.02	
9012	LOC102552705	-1.23	11	1.83	12	1.48	
9013	LOC500956	-1.23	14	2.72	19	2.2	
9014	Mrps30	-1.23	47	8.79	58	7.12	
9015	Orai1	-1.23	57	11.62	56	9.41	
9016	RGD1304810	-1.23	35	1.74	53	1.41	
9017	Spc25	-1.23	17	3.47	14	2.81	
9018	Srrd	-1.23	23	5.86	17	4.75	
9019	Stambpl1	-1.23	28	2.33	28	1.88	
9020	Zfp563	-1.23	12	3.23	13	2.62	
9021	AC098462.2	-1.23	0	2.32	0	1.88	
9022	Dhx34	-1.23	65	5.58	72	4.52	
9023	Myh9	-1.23	0	0.7	0	0.57	
9024	Pde1a	-1.23	109	13.45	129	10.89	
9025	Ppp1r37	-1.23	173	19.26	206	15.6	
9026	Rad1	-1.23	13	3.19	12	2.58	
9027	Rhbdd1	-1.23	111	8.86	143	7.17	
9028	Mlec	-1.24	1127	25.79	1177	20.87	
9029	Adrbk1	-1.24	160	23.6	174	19.1	
9030	Tuba1a	-1.24	1373	985.22	1313	797.01	
9031	Sec13	-1.24	123	31.43	141	25.42	
9032	Sf3b3	-1.24	625	47.17	684	38.15	
9033	Tbc1d10b	-1.24	170	15.44	200	12.49	
9034	Plat	-1.24	34	6.98	38	5.64	
9035	Ttc23	-1.24	102	8.53	122	6.9	
9036	Adamts1	-1.24	440	36.37	481	29.41	
9037	Atp6v0a2	-1.24	281	11.5	302	9.3	
9038	Suclg1	-1.24	244	33.95	280	27.45	
9039	Fopnl	-1.24	83	18.41	105	14.88	
9040	Grwd1	-1.24	76	13.32	88	10.76	
9041	Pnkp	-1.24	41	7	50	5.66	
9042	Zfp653	-1.24	59	6.22	63	5.02	
9043	Arhgap44	-1.24	72	5.18	91	4.19	
9044	Pspc1	-1.24	260	12.36	321	9.99	
9045	Cxadr	-1.24	374	22.21	547	17.95	
9046	Capn15	-1.24	76	4.31	94	3.48	
9047	Cnpy4	-1.24	89	20.82	97	16.82	
9048	Atp2a2	-1.24	1104	56.61	1227	45.71	
9049	Cuedc1	-1.24	41	5.07	39	4.1	
9050	Erc2	-1.24	63	7.62	62	6.15	
9051	Lrrc4c	-1.24	45	3.22	76	2.6	
9052	Rnf168	-1.24	63	5.48	73	4.43	
9053	Trappc6a	-1.24	45	9.38	37	7.57	
9054	Cyhr1	-1.24	358	13.8	419	11.14	
9055	Stk11ip	-1.24	163	11.79	182	9.51	
9056	Naa35	-1.24	288	35.11	326	28.33	
9057	Sirt3	-1.24	101	16.49	135	13.31	
9058	Fcf1	-1.24	86	32.77	98	26.45	
9059	Dynll1	-1.24	222	133.28	245	107.53	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9060	Fam126a	-1.24	267	5.33	216	4.3	
9061	Mafg	-1.24	148	17.21	182	13.88	
9062	Ncstn	-1.24	940	114.27	1013	92.16	
9063	Chmp1a	-1.24	211	30.75	234	24.8	
9064	Ercc3	-1.24	153	19	165	15.32	
9065	Pdik1l	-1.24	58	4.11	64	3.32	
9066	Atp8b2	-1.24	587	37.54	640	30.27	
9067	Dennd4b	-1.24	135	8.8	135	7.09	
9068	Slc27a4	-1.24	136	15.11	152	12.18	
9069	Socs7	-1.24	102	13.36	112	10.77	
9070	Fermt1	-1.24	83	5.55	85	4.48	
9071	Dtymk	-1.24	163	26.79	165	21.59	
9072	Adck5	-1.24	419	36.27	439	29.22	
9073	RT1-A1	-1.24	161	24.06	153	19.38	
9074	Calcr1	-1.24	119	8.01	134	6.45	
9075	Cdkn1c	-1.24	13	2.31	14	1.86	
9076	Dnajc25	-1.24	33	7.41	35	5.97	
9077	Rhno1	-1.24	40	19.94	42	16.06	
9078	Rita1	-1.24	13	3.69	15	2.97	
9079	Sema4d	-1.24	90	5.69	113	4.58	
9080	Zfyve19	-1.24	38	6.02	42	4.85	
9081	Fam53a	-1.24	78	4.44	88	3.58	
9082	Ganc	-1.24	66	2.93	75	2.36	
9083	Has3	-1.24	20	0.68	24	0.54	
9084	Micu1	-1.24	180	20.17	195	16.24	
9085	Myg1	-1.24	92	24.3	111	19.57	
9086	Nfkbib	-1.24	28	6.73	30	5.42	
9087	Rfxap_1	-1.24	0	5.75	0	4.63	
9088	Rpusd1	-1.24	30	5.04	31	4.06	
9089	Serp1	-1.24	310	46.56	336	37.49	
9090	Ube2e2	-1.24	18	6.47	23	5.21	
9091	Kcnk3	-1.24	17	1.02	16	0.82	
9092	Ptk7	-1.24	394	48.49	403	39.03	
9093	Rpl23a	-1.24	121	184.24	156	148.3	
9094	Park7	-1.24	181	25.89	198	20.83	
9095	Eif4a1	-1.24	1201	313.18	1199	252.03	
9096	Nob1	-1.24	181	34.1	188	27.44	
9097	Nck2	-1.24	238	18.74	303	15.08	
9098	Lrch4	-1.24	119	12.43	127	10	
9099	Tti1	-1.24	150	8.76	198	7.05	
9100	Mrps5	-1.24	76	10.05	81	8.08	
9101	Rilpl1	-1.24	167	17.01	176	13.68	
9102	Ccdc137	-1.24	61	6.28	69	5.05	
9103	Mboat2	-1.24	93	6.76	94	5.44	
9104	LOC498435	-1.24	44	8.5	45	6.83	
9105	LOC102552166	-1.24	25	4.47	19	3.6	
9106	Tmub2	-1.24	102	13.4	120	10.77	
9107	Raver1	-1.24	333	32.48	361	26.09	
9108	Gnl1	-1.24	126	8.14	138	6.54	
9109	Ccdc127	-1.25	29	7.79	31	6.26	
9110	Ndufaf1	-1.25	31	5.13	30	4.12	
9111	Plxnd1	-1.25	65	3.2	71	2.57	
9112	Vti1b	-1.25	42	8.43	50	6.77	
9113	Bcl2l12	-1.25	54	5.78	54	4.64	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9114	Dgka	-1.25	78	6.44	92	5.17	
9115	Psenen	-1.25	85	55.13	92	44.27	
9116	Sdf2l1	-1.25	29	9.19	29	7.38	
9117	Man1b1	-1.25	408	37.32	452	29.96	
9118	Dgat1	-1.25	90	14.09	101	11.31	
9119	Dzip1	-1.25	193	21.67	203	17.39	
9120	Plcb4	-1.25	227	8.26	243	6.63	
9121	Mrc2	-1.25	418	24.13	445	19.36	
9122	Ercc4	-1.25	35	7.23	37	5.8	
9123	Tmem132a	-1.25	394	40.89	435	32.79	
9124	Dpp3	-1.25	277	34.43	308	27.61	
9125	Zscan21	-1.25	171	20.41	205	16.36	
9126	Fbxo46	-1.25	96	8.55	119	6.86	
9127	Cirh1a	-1.25	165	24.34	182	19.51	
9128	Prkab1	-1.25	109	14.62	118	11.72	
9129	Vps18	-1.25	102	9.02	117	7.23	
9130	Srebf2	-1.25	836	53.14	911	42.59	
9131	Spty2d1	-1.25	152	11.2	162	8.98	
9132	Atg10	-1.25	65	3.19	104	2.55	
9133	Atg4b	-1.25	120	17.4	137	13.93	
9134	Bora	-1.25	33	2.22	46	1.78	
9135	Mtcl1	-1.25	261	9.59	310	7.68	
9136	Ndufa9	-1.25	230	52.68	273	42.19	
9137	Prkd2	-1.25	53	4.82	72	3.86	
9138	RGD1565784	-1.25	28	5.89	32	4.72	
9139	Shcbp1	-1.25	17	2.55	19	2.04	
9140	Ttc38	-1.25	29	2.53	32	2.03	
9141	Wdr45	-1.25	51	7.87	60	6.3	
9142	Zfp788	-1.25	28	3.67	30	2.94	
9143	Dpf3	-1.25	106	8.18	127	6.55	
9144	LOC688452	-1.25	107	4.56	118	3.65	
9145	Samd1	-1.25	71	17.64	76	14.13	
9146	Dnajb12	-1.25	204	24.1	234	19.29	
9147	Ppat	-1.25	110	7.63	123	6.1	
9148	Cachd1	-1.25	96	8.64	110	6.91	
9149	Lamc1	-1.25	709	31.01	780	24.81	
9150	Mmp23	-1.25	194	35.95	206	28.77	
9151	Cers6	-1.25	128	10.3	159	8.24	
9152	Mrpl23	-1.25	72	38.22	73	30.58	
9153	Sar1b	-1.25	128	28.64	169	22.91	
9154	Fastk	-1.25	143	22.5	158	18	
9155	Cacybp	-1.25	90	14.08	103	11.26	
9156	Clk3	-1.25	183	25.47	220	20.37	
9157	Rpap1	-1.25	125	8.65	149	6.91	
9158	Cep76	-1.25	59	3.12	68	2.5	
9159	Coq9	-1.25	128	24.63	152	19.69	
9160	Mcts1	-1.25	70	7.34	77	5.87	
9161	Nipal2	-1.25	41	4.77	55	3.81	
9162	Pibf1	-1.25	99	4.12	129	3.3	
9163	ldh3a	-1.25	185	25.61	202	20.47	
9164	Mrpl16	-1.25	35	9.14	49	7.3	
9165	Fbl	-1.25	124	40.16	127	32.09	
9166	Uhrf1bp1l	-1.25	293	20.17	304	16.11	
9167	Aco2	-1.25	1100	59.74	1202	47.71	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9168	Fxr2	-1.25	450	52.92	489	42.26	
9169	Xpnpep1	-1.25	379	47.05	404	37.56	
9170	Ppp3ca	-1.25	323	27.55	436	22	
9171	Kif7	-1.25	70	5.31	79	4.24	
9172	Atp5l	-1.25	143	100.95	152	80.58	
9173	Vars	-1.25	267	22.88	286	18.26	
9174	March6	-1.25	287	29.29	312	23.37	
9175	Mllt10	-1.25	239	16.52	297	13.18	
9176	Atg4c	-1.25	35	3.97	46	3.17	
9177	Dnajb14	-1.25	112	5.76	161	4.59	
9178	Dusp11_1	-1.25	0	4.23	0	3.38	
9179	Fadd	-1.25	15	4.09	16	3.26	
9180	Nudt13	-1.25	21	2.13	27	1.7	
9181	Proser3	-1.25	100	9.26	114	7.38	
9182	RGD1307947	-1.25	13	2.27	20	1.81	
9183	Rnf122	-1.25	89	17.06	93	13.6	
9184	Slirp	-1.25	21	1.93	19	1.54	
9185	Trim47	-1.25	17	2.47	21	1.97	
9186	Impdh2	-1.25	203	43.08	218	34.35	
9187	Pcdhgb6	-1.25	28	4.49	29	3.58	
9188	Hsd17b10	-1.25	79	64.56	88	51.46	
9189	Ranbp3	-1.25	199	29.42	221	23.45	
9190	Mt2A	-1.26	26	72.03	29	57.4	
9191	Ndufs2	-1.26	303	65.11	330	51.88	
9192	Maged1	-1.26	1369	148.32	1468	118.17	
9193	Cdkn1b	-1.26	177	28.26	197	22.52	
9194	Nop16	-1.26	65	18.37	73	14.64	
9195	Wdr18	-1.26	44	15.95	40	12.7	
9196	Mum1	-1.26	145	16	143	12.75	
9197	Srsf3	-1.26	558	63.69	547	50.73	
9198	Uxs1	-1.26	344	40.56	401	32.3	
9199	Nat10	-1.26	84	6.93	89	5.52	
9200	Ogdh	-1.26	276	45.17	263	35.96	
9201	Hyou1	-1.26	1343	104.08	1431	82.84	
9202	Rpp21	-1.26	33	9.72	34	7.73	
9203	Edc3	-1.26	90	11.85	113	9.43	
9204	Pnma2	-1.26	64	6.75	65	5.37	
9205	Pxmp4	-1.26	35	8.17	38	6.5	
9206	Schip1	-1.26	58	5.04	101	4.01	
9207	Wdr70	-1.26	90	5.26	116	4.18	
9208	Chd9	-1.26	340	9.59	368	7.63	
9209	Atg14	-1.26	80	6.54	85	5.2	
9210	Sap130	-1.26	343	23.48	390	18.67	
9211	Cul7	-1.26	159	15.85	174	12.6	
9212	Clstn2	-1.26	49	2.12	56	1.69	
9213	Itpr1p1	-1.26	16	3.09	17	2.45	
9214	Myrip	-1.26	87	3.74	72	2.97	
9215	Plekhg5	-1.26	38	2.88	51	2.28	
9216	Tmem134	-1.26	86	25.49	90	20.25	
9217	Dgcr6	-1.26	26	3.84	29	3.05	
9218	Gorasp1	-1.26	66	9.31	70	7.39	
9219	Msr2	-1.26	32	5.05	46	4.01	
9220	Pex14	-1.26	149	18.27	173	14.51	
9221	Ap3m1	-1.26	196	20.29	251	16.11	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9222	Usp7	-1.26	420	39.62	470	31.45	
9223	Trappc4	-1.26	70	17.34	70	13.76	
9224	Cpped1	-1.26	84	8.57	85	6.8	
9225	Cdk5	-1.26	57	8.38	62	6.65	
9226	Tomm7	-1.26	49	47.18	53	37.44	
9227	LOC100910540	-1.26	9	9.57	8	7.59	
9228	Rnf213	-1.26	392	8.11	433	6.43	
9229	Rcl1	-1.26	39	4.79	46	3.8	
9230	Kxd1	-1.26	105	20.06	125	15.91	
9231	Tmem231	-1.26	33	3.79	40	3.01	
9232	Hes6	-1.26	70	16.88	71	13.38	
9233	Cct5	-1.26	600	120.41	650	95.46	
9234	Ing4	-1.26	184	37.82	224	29.98	
9235	Rbmx1	-1.26	114	52	127	41.22	
9236	Ntan1	-1.26	60	14.19	72	11.24	
9237	Atp5h	-1.26	118	53.35	119	42.27	
9238	Pgrmc1	-1.26	216	52.45	254	41.55	
9239	Cpt2	-1.26	120	17.79	131	14.09	
9240	H2afy2	-1.26	192	25.39	192	20.11	
9241	Ube2s	-1.26	405	161.51	432	127.91	
9242	Kif5b	-1.26	757	77.04	785	61	
9243	Pcnx13	-1.26	431	24.15	465	19.12	
9244	Gemin4	-1.26	120	12.72	127	10.07	
9245	Metap1d	-1.26	64	1.92	80	1.52	
9246	Mphosph8	-1.26	11	9.37	7	7.42	
9247	Pop5	-1.26	18	4.28	23	3.39	
9248	Pus7	-1.26	49	5.01	54	3.97	
9249	Rabep2	-1.26	81	9.12	94	7.22	
9250	RGD1565059	-1.26	22	3.98	32	3.15	
9251	Rbmx2	-1.26	16	3.55	21	2.81	
9252	Pygo2	-1.26	235	29.45	249	23.3	
9253	Pkp4	-1.26	86	5.66	96	4.47	
9254	Wdr35	-1.26	79	5.96	88	4.71	
9255	Sepr1	-1.27	165	40.14	182	31.73	
9256	Dnpep	-1.27	283	57.6	297	45.53	
9257	Banp	-1.27	168	12.07	209	9.54	
9258	Pcna	-1.27	192	60.24	215	47.6	
9259	Dpp9	-1.27	280	26.66	308	21.07	
9260	Pcyox1l	-1.27	148	23.15	177	18.29	
9261	Phldb1	-1.27	690	38.56	751	30.45	
9262	Slc25a11	-1.27	110	32.1	116	25.34	
9263	Nfyc	-1.27	315	28.99	359	22.88	
9264	Ppp1cc	-1.27	575	72.18	620	56.96	
9265	AABR07042514.3	-1.27	41	32.26	45	25.46	
9266	Arhgap39	-1.27	139	5.65	154	4.46	
9267	Armc1	-1.27	64	15.7	67	12.39	
9268	Bex2	-1.27	52	25.23	58	19.91	
9269	Blvra	-1.27	22	5.88	26	4.64	
9270	Eif2d	-1.27	160	25.9	165	20.44	
9271	Fuz	-1.27	35	3.96	28	3.13	
9272	Hk2	-1.27	120	7.2	133	5.68	
9273	LOC680121	-1.27	0	3.1	0	2.45	
9274	Med22_1	-1.27	0	19.56	0	15.43	
9275	Pex3	-1.27	51	6.62	63	5.22	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9276	Phf19	-1.27	19	1.72	22	1.36	
9277	Tiam1	-1.27	23	1.37	31	1.08	
9278	Mt-co2	-1.27	5021	2668.93	5307	2106.2	
9279	Ltbp3	-1.27	793	63.27	851	49.9	
9280	Sep15	-1.27	400	83.09	461	65.52	
9281	Alg5	-1.27	71	13.98	95	11.03	
9282	Lamtor1	-1.27	164	74.31	188	58.58	
9283	Polrmt	-1.27	59	5.32	62	4.19	
9284	Ssr3	-1.27	677	93.67	711	73.84	
9285	Sidt2	-1.27	429	32.46	482	25.58	
9286	LOC497940	-1.27	73	9.21	83	7.26	
9287	Nmt2	-1.27	264	29.08	295	22.91	
9288	Traf7	-1.27	220	28.38	240	22.36	
9289	Uqcrh	-1.27	183	111.2	208	87.59	
9290	Zfp251	-1.27	140	10.19	178	8.03	
9291	Yipf3	-1.27	137	19.7	147	15.51	
9292	Zfp706	-1.27	165	23.67	177	18.64	
9293	Abcg3l3	-1.27	181	10.27	224	8.08	
9294	Dtx3	-1.27	120	20.83	133	16.4	
9295	Atg7	-1.27	71	4.54	89	3.58	
9296	Ccdc58	-1.27	40	5.66	46	4.45	
9297	H2afv	-1.27	51	14.51	83	11.42	
9298	Hscb	-1.27	41	7.21	54	5.67	
9299	Nfatc2ip	-1.27	21	3.18	22	2.5	
9300	Ssh3	-1.27	87	10.25	102	8.07	
9301	Ston2	-1.27	76	6.48	75	5.1	
9302	AABR07009715.1	-1.27	24	17.5	18	13.78	
9303	RGD1562987	-1.27	107	37.15	122	29.23	
9304	Srp9	-1.27	50	10.36	48	8.15	
9305	Fbn1	-1.27	863	30.64	924	24.11	
9306	Slc30a1	-1.27	145	21.22	156	16.7	
9307	Zfp46	-1.27	114	9.25	121	7.28	
9308	Eif5a	-1.27	1172	366.3	1243	288.1	
9309	Kntc1	-1.27	90	4.3	104	3.38	
9310	Ric1	-1.27	207	12.44	233	9.78	
9311	Ints3	-1.27	294	20	322	15.73	
9312	Snx9	-1.27	135	19.71	136	15.49	
9313	LOC100911248	-1.27	70	16.6	67	13.05	
9314	Zfp394	-1.27	43	5.74	52	4.51	
9315	Ehmt2	-1.27	483	38.07	492	29.92	
9316	Spcs2	-1.27	202	24.01	225	18.86	
9317	Tmem2	-1.27	418	20.31	458	15.96	
9318	Vdac1	-1.27	302	87.9	308	69.03	
9319	Acadm	-1.27	143	22.25	154	17.46	
9320	Bag4	-1.27	34	5.28	30	4.15	
9321	C1rl	-1.27	28	3.11	31	2.44	
9322	Clcf1	-1.27	21	3.21	26	2.52	
9323	Pck2	-1.27	76	11.28	73	8.85	
9324	Uba2-ps1	-1.27	50	13.87	44	10.89	
9325	Zc3h12a	-1.27	21	2.54	20	2	
9326	Rpain	-1.27	43	9.42	49	7.39	
9327	Ganab	-1.27	988	88.41	1039	69.39	
9328	Uhrf1	-1.27	185	17	195	13.34	
9329	Elavl1	-1.27	441	47.8	546	37.51	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9330	Ptpn4	-1.27	1186	31.79	1298	24.94	
9331	Upf1	-1.27	339	28.17	361	22.11	
9332	Ap3b1	-1.27	369	20.19	441	15.84	
9333	Prune	-1.27	106	10.3	129	8.08	
9334	Prepl	-1.27	86	7.72	79	6.06	
9335	Fads1	-1.28	490	50.24	528	39.38	
9336	Dus3l	-1.28	64	11.22	58	8.79	
9337	Eftud2	-1.28	407	40.59	435	31.81	
9338	Arhgef10	-1.28	104	6.42	119	5.03	
9339	Sik3	-1.28	562	18.84	635	14.76	
9340	Dapk3	-1.28	97	20.08	103	15.72	
9341	Alg3	-1.28	47	10.7	46	8.38	
9342	BC055324	-1.28	50	2.41	62	1.88	
9343	Kbtbd8	-1.28	22	1.53	22	1.2	
9344	RGD1562339	-1.28	43	10.26	39	8.04	
9345	Rttn	-1.28	65	2.07	62	1.62	
9346	Supv311	-1.28	116	11.76	121	9.21	
9347	Tesk1	-1.28	107	10.58	113	8.29	
9348	Tril	-1.28	398	29.97	420	23.47	
9349	Htra1	-1.28	390	66.92	427	52.4	
9350	Vac14	-1.28	220	18.3	242	14.33	
9351	Psip1	-1.28	257	14.2	364	11.12	
9352	Cry2	-1.28	161	11.67	165	9.14	
9353	Ints2	-1.28	94	5.15	95	4.03	
9354	Ppp2r5c	-1.28	455	46.85	568	36.65	
9355	Trappc3	-1.28	125	22.98	148	17.98	
9356	Exosc4	-1.28	50	8.66	55	6.77	
9357	Lmbr1l	-1.28	189	20.94	217	16.38	
9358	Galns	-1.28	146	8.2	161	6.41	
9359	Cbx8	-1.28	22	5.87	24	4.58	
9360	Chid1	-1.28	0	3.89	0	3.04	
9361	Eefsec	-1.28	74	5.98	80	4.67	
9362	Hyal3	-1.28	24	5.69	26	4.44	
9363	Mfhas1	-1.28	31	2.51	28	1.96	
9364	Nufip1	-1.28	141	12.49	187	9.76	
9365	Zfp729a	-1.28	38	3.4	37	2.65	
9366	LOC499770	-1.28	35	8.04	39	6.29	
9367	Necap1	-1.28	128	15.89	151	12.42	
9368	Ppp2r5b	-1.28	105	11.87	107	9.28	
9369	Rgag4	-1.28	22	4.42	23	3.45	
9370	Sema3b	-1.28	226	32.01	236	25.01	
9371	Tpst1	-1.28	115	16.64	120	13	
9372	Itgb1bp1	-1.28	100	18.63	127	14.55	
9373	Gdpd1	-1.28	92	11.97	122	9.35	
9374	Pias4	-1.28	83	8.24	94	6.43	
9375	Rtn2	-1.28	165	25.45	167	19.86	
9376	Rps3	-1.28	622	294.94	648	230.2	
9377	Mrpl50	-1.28	18	4.65	24	3.63	
9378	Mthfs	-1.28	29	3.03	41	2.36	
9379	N4bp3_1	-1.28	0	2.86	0	2.23	
9380	Incenp	-1.28	83	7.01	85	5.47	
9381	Wrap53	-1.28	68	9.19	72	7.17	
9382	Atp5b	-1.28	2288	461.52	2388	360.01	
9383	Ap2m1	-1.28	639	125.9	675	98.17	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9384	Ldb1	-1.28	577	77.53	642	60.46	
9385	Nabp2	-1.28	78	17.44	80	13.6	
9386	Hat1	-1.28	94	15.47	116	12.06	
9387	Spata5	-1.28	120	7.71	152	6.01	
9388	Ankrd52	-1.28	616	28.46	637	22.19	
9389	Bles03	-1.28	97	20.31	103	15.83	
9390	Pofut1	-1.28	167	15.74	177	12.27	
9391	Swap70	-1.28	57	4.39	78	3.42	
9392	Sccpdh	-1.28	0	13.84	0	10.78	
9393	Calr	-1.28	2479	483.6	2578	376.79	
9394	Fubp3	-1.28	242	27.72	301	21.6	
9395	Zcchc12	-1.28	24	4.16	26	3.24	
9396	AC141169.2	-1.28	63	3.91	67	3.05	
9397	Pard6b	-1.28	53	5.28	53	4.11	
9398	Adgra3	-1.28	297	21.78	298	16.95	
9399	Tut1	-1.28	90	9.21	93	7.17	
9400	Ift80	-1.29	71	4.49	75	3.5	
9401	Ctdnep1	-1.29	206	47.22	222	36.74	
9402	Emc7	-1.29	103	31.1	106	24.2	
9403	Mtap	-1.29	122	5.13	164	3.99	
9404	Scamp2	-1.29	273	38.38	291	29.86	
9405	Cpt1a	-1.29	398	28.95	436	22.52	
9406	Ociad1	-1.29	272	53.22	338	41.4	
9407	Cox8a	-1.29	203	145.56	218	113.2	
9408	RGD1310352	-1.29	557	82.33	589	64.02	
9409	Mapk3	-1.29	563	106.53	588	82.83	
9410	Fam173b	-1.29	60	6.57	79	5.11	
9411	Gtf3c5	-1.29	114	12.83	127	9.98	
9412	Irak3	-1.29	41	2.86	41	2.22	
9413	Tmem219	-1.29	35	4.04	41	3.14	
9414	Tsr1	-1.29	127	14.99	135	11.66	
9415	Gstm1	-1.29	107	32.44	105	25.23	
9416	RGD1562948	-1.29	72	13.56	92	10.53	
9417	Ppm1l	-1.29	158	6.49	166	5.04	
9418	Pfdn4	-1.29	58	24.59	64	19.1	
9419	Pomt1	-1.29	167	16.91	191	13.14	
9420	Notch2	-1.29	802	33.15	840	25.74	
9421	Bdh2	-1.29	45	8.14	57	6.32	
9422	Ssh2	-1.29	41	1.48	58	1.15	
9423	Eif2b2	-1.29	59	7.79	56	6.05	
9424	Rhbdf2	-1.29	63	5.36	66	4.16	
9425	Ubxn8	-1.29	32	2.68	35	2.08	
9426	Ssr2	-1.29	335	109.07	352	84.67	
9427	Edc4	-1.29	292	19.78	317	15.35	
9428	Naa40	-1.29	137	11.94	150	9.27	
9429	Xpr1	-1.29	114	11.46	125	8.89	
9430	Neto2	-1.29	79	12.16	101	9.43	
9431	Zfp1	-1.29	57	9.32	62	7.23	
9432	Tle4	-1.29	211	8.02	238	6.22	
9433	Btf3l4	-1.29	29	20.49	30	15.89	
9434	Coq5	-1.29	52	6.27	46	4.86	
9435	Mzt2b	-1.29	32	8.05	29	6.24	
9436	Zfand2b	-1.29	31	7.57	30	5.87	
9437	Zfp672	-1.29	63	6.69	67	5.19	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9438	Marc2	-1.29	70	10.07	81	7.81	
9439	Pdgfa	-1.29	33	5.17	42	4.01	
9440	Setd6	-1.29	29	5.81	36	4.5	
9441	Maea	-1.29	215	32.17	238	24.93	
9442	Atxn7l3	-1.29	58	15.33	59	11.88	
9443	Vps16	-1.29	151	19.1	165	14.8	
9444	Elovl1	-1.29	239	49.86	243	38.62	
9445	Cdca4	-1.29	125	17.59	142	13.62	
9446	Dnajc5	-1.29	101	28.16	118	21.81	
9447	Ror2	-1.29	51	2.57	63	1.99	
9448	Dvl1	-1.29	118	13.85	129	10.72	
9449	Fut8	-1.29	339	36.25	357	28.06	
9450	Mtss1	-1.29	165	6.16	169	4.77	
9451	Extl3	-1.29	255	27.93	282	21.61	
9452	Dym	-1.29	163	15.44	190	11.95	
9453	Slc2a8	-1.29	34	5.03	38	3.89	
9454	Tvp23b	-1.29	97	19.07	91	14.75	
9455	Bpnt1	-1.29	70	10.45	67	8.08	
9456	Kdelr2	-1.29	487	88.14	511	68.16	
9457	Rrp1b	-1.29	180	14.39	189	11.13	
9458	Prickle1	-1.29	96	7.1	106	5.49	
9459	Megf8	-1.29	718	19.68	756	15.21	
9460	Ppa2	-1.29	77	13.41	88	10.37	
9461	Nsdhl	-1.29	184	21.48	190	16.61	
9462	Mfsd5	-1.29	89	18.58	92	14.36	
9463	Actr5	-1.29	35	5.56	42	4.3	
9464	Dcaf15	-1.29	103	14.55	98	11.24	
9465	LOC100910275	-1.29	9	21.24	4	16.41	
9466	Rab13	-1.29	35	10.19	36	7.87	
9467	Timm10	-1.29	31	10.29	33	7.95	
9468	Otub1	-1.29	273	58.38	264	45.09	
9469	Prkar1a	-1.29	820	198.96	892	153.66	
9470	Hace1	-1.3	107	6.42	118	4.96	
9471	Nup188	-1.3	465	32.11	496	24.79	
9472	Camsap3	-1.3	71	5.11	75	3.94	
9473	Nupl1	-1.3	100	9.06	114	6.99	
9474	Pigv	-1.3	64	4.37	68	3.37	
9475	Pp2d1	-1.3	31	3.05	53	2.35	
9476	Psmc9	-1.3	48	8.36	51	6.45	
9477	Dazap2	-1.3	209	78.49	225	60.57	
9478	Tbc1d7	-1.3	35	8.22	38	6.34	
9479	Rpl35	-1.3	184	176.98	192	136.56	
9480	Zfp395	-1.3	228	19.43	234	14.99	
9481	Rnpc3	-1.3	98	10.19	118	7.86	
9482	Pisd	-1.3	166	31.75	190	24.49	
9483	Tbrg1	-1.3	38	68.99	44	53.2	
9484	Letm1	-1.3	173	21.33	202	16.45	
9485	Zfp169	-1.3	40	4.32	39	3.33	
9486	Arhgef28	-1.3	740	22.5	752	17.35	
9487	Ly6e	-1.3	386	65.57	400	50.54	
9488	Wars	-1.3	147	12.66	158	9.76	
9489	Igsf3	-1.3	204	9.3	214	7.17	
9490	Prmt7	-1.3	113	14.29	117	11.01	
9491	Ddit4l2	-1.3	240	92.74	254	71.46	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9492	Fam78a	-1.3	173	23.46	196	18.07	
9493	Dag1	-1.3	5826	408.79	6023	314.92	
9494	Ccdc23	-1.3	39	13.96	41	10.75	
9495	Spag5	-1.3	36	3.06	43	2.35	
9496	Tmem198b	-1.3	35	4.53	35	3.49	
9497	Senp2	-1.3	79	11.63	96	8.95	
9498	Snx14	-1.3	148	13	173	10	
9499	Dffb	-1.3	57	4.94	57	3.8	
9500	Dcaf12l1	-1.3	34	3.49	35	2.68	
9501	Dhtkd1	-1.3	40	2.83	46	2.18	
9502	Trrap	-1.3	1520	40.35	1596	31.04	
9503	Gnb2l1_1	-1.3	1146	230.1	1138	177.02	
9504	Accs	-1.3	44	5.88	43	4.52	
9505	Entpd1	-1.3	28	2.68	32	2.06	
9506	Sepsecs	-1.3	48	3.53	62	2.72	
9507	Slc35c1	-1.3	74	7.89	80	6.06	
9508	Pik3r4	-1.3	222	15.06	245	11.58	
9509	Prcc	-1.3	230	30.39	262	23.37	
9510	Pard3	-1.3	584	15.38	663	11.82	
9511	Tomm40	-1.3	83	24	81	18.44	
9512	Slc9a6	-1.3	148	8.21	166	6.31	
9513	Parp2	-1.3	84	13.34	91	10.24	
9514	Zfp687	-1.3	149	13.49	151	10.36	
9515	Cnep1r1	-1.3	100	23.69	118	18.19	
9516	Hps3	-1.3	40	3.44	49	2.64	
9517	Smox	-1.3	50	5.15	60	3.95	
9518	Rpl7	-1.3	1049	84.84	1126	65.11	
9519	Sesn3	-1.3	257	28.14	278	21.59	
9520	Gcsh	-1.3	44	11.03	46	8.47	
9521	Ighmbp2	-1.3	46	3.71	52	2.84	
9522	Dctn3	-1.3	89	29.54	98	22.65	
9523	Fam50a_2	-1.3	0	10.67	0	8.18	
9524	ST7	-1.3	68	5.72	89	4.38	
9525	Gdi1	-1.3	879	123.2	864	94.46	
9526	Ccdc126	-1.3	45	6.29	48	4.82	
9527	Faxdc2	-1.3	98	15.13	102	11.6	
9528	Pskh1	-1.3	143	10.54	161	8.08	
9529	Zfp9	-1.3	41	6.32	42	4.84	
9530	5_8S_rRNA_14	-1.31	0	1351.25	0	1035	
9531	Gin1	-1.31	59	3.82	67	2.93	
9532	Tmem69	-1.31	42	7.64	42	5.85	
9533	Dos	-1.31	52	5.62	62	4.3	
9534	AABR07029742.1	-1.31	42	8.58	43	6.56	
9535	Slc25a20	-1.31	197	34.33	208	26.27	
9536	Mesdc1	-1.31	169	30.31	172	23.19	
9537	Agpat3	-1.31	241	12.85	263	9.83	
9538	Kihl21	-1.31	88	8.13	91	6.22	
9539	Ebf4	-1.31	82	9.25	111	7.08	
9540	Pde6d	-1.31	109	13.91	135	10.64	
9541	LOC498555	-1.31	104	262.01	144	200.32	
9542	Rps19	-1.31	18	123.67	30	94.51	
9543	Hmgcr	-1.31	615	49.37	634	37.73	
9544	Cnm3	-1.31	154	11.99	169	9.16	
9545	Wiz	-1.31	331	24.87	384	19	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9546	Top2a	-1.31	184	11.79	195	9.01	
9547	Zdhhc1	-1.31	37	10.47	40	7.99	
9548	Tnk2	-1.31	256	16.06	308	12.26	
9549	Nr5a2	-1.31	940	49.14	967	37.51	
9550	Gmppb	-1.31	49	9.04	48	6.9	
9551	Lrrc8a	-1.31	364	37.26	388	28.43	
9552	Evl	-1.31	316	37.47	358	28.58	
9553	Hps6	-1.31	49	6.57	50	5.01	
9554	LOC100911615	-1.31	0	16.14	0	12.31	
9555	Atraid	-1.31	54	17.59	53	13.42	
9556	Ccdc22	-1.31	44	7.04	46	5.37	
9557	Rqcd1	-1.31	172	16.43	196	12.53	
9558	Bpgm	-1.31	59	9.79	59	7.46	
9559	Ift46	-1.31	79	11.21	73	8.55	
9560	RGD1310951	-1.31	243	15.38	314	11.73	
9561	C1galt1	-1.31	107	6.1	111	4.65	
9562	Mmp14	-1.31	476	69.23	490	52.76	
9563	RGD1562218	-1.31	163	14.06	176	10.72	
9564	Rint1	-1.31	70	8.53	81	6.5	
9565	Bsg	-1.31	869	183.54	905	139.82	
9566	Eral1	-1.31	69	9.62	80	7.32	
9567	Rnf19b	-1.31	210	24.49	231	18.65	
9568	Zfp652	-1.31	63	7.66	66	5.83	
9569	Sod2	-1.31	172	29.84	175	22.7	
9570	Yaf2	-1.31	82	11.76	119	8.95	
9571	Smarca4	-1.31	1007	55.6	1036	42.3	
9572	Tmem176a	-1.31	237	76.77	242	58.4	
9573	Gpr89b	-1.31	147	23.31	154	17.73	
9574	Exoc7_2	-1.31	3	10.07	2	7.66	
9575	Sdhd	-1.32	121	35.02	136	26.63	
9576	RGD1306058	-1.32	84	22.9	106	17.41	
9577	Exoc4	-1.32	294	12.21	314	9.28	
9578	Eif3l	-1.32	113	30.45	104	23.14	
9579	Cstf1	-1.32	132	14.04	155	10.67	
9580	Atp1b3	-1.32	709	137.62	738	104.52	
9581	Zfp335	-1.32	155	10.8	175	8.2	
9582	Capn1	-1.32	349	38.93	349	29.55	
9583	Nav2	-1.32	909	19.58	1022	14.86	
9584	Got2	-1.32	391	59.88	425	45.46	
9585	Sptssa	-1.32	155	36.4	179	27.63	
9586	Ttc27	-1.32	177	17.01	192	12.91	
9587	Pdhb	-1.32	164	24.26	164	18.41	
9588	Tmem184b	-1.32	303	29.01	314	22.01	
9589	Cherp	-1.32	273	23.76	277	18.03	
9590	Sec23b	-1.32	237	26.52	248	20.12	
9591	Homer3	-1.32	80	7.2	100	5.46	
9592	Zfp161	-1.32	71	6.81	74	5.17	
9593	Saal1	-1.32	74	4.01	88	3.04	
9594	Reep5	-1.32	294	34.33	312	26.04	
9595	Ap1m1	-1.32	263	39	283	29.58	
9596	Bag6	-1.32	1238	110.85	1267	84.06	
9597	Zadh2	-1.32	188	15.1	197	11.45	
9598	Upf3b	-1.32	164	10.94	187	8.29	
9599	Snd1	-1.32	655	59.85	695	45.38	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9600	Rhbdf1	-1.32	161	17.79	173	13.48	
9601	Snx17	-1.32	165	29.2	172	22.12	
9602	Bcl10	-1.32	93	16.83	96	12.75	
9603	Prc1	-1.32	81	9.15	84	6.93	
9604	Cmtr1	-1.32	446	35.63	486	26.97	
9605	Pdia5	-1.32	125	16.67	135	12.62	
9606	Gtf2ird1	-1.32	40	14.84	49	11.23	
9607	Pcdhac1	-1.32	280	3.24	275	2.45	
9608	Serpinh1	-1.32	2159	366.91	2189	277.68	
9609	Mavs	-1.32	103	9.87	107	7.47	
9610	Sox5	-1.32	263	8.57	388	6.48	
9611	Inmt	-1.32	85	27.12	85	20.52	
9612	Cd276	-1.32	303	19.3	343	14.59	
9613	Cdc40	-1.32	116	9.1	121	6.88	
9614	Atf6b	-1.32	179	33.9	157	25.63	
9615	Fzd1	-1.32	367	30.54	372	23.08	
9616	Polr3d	-1.32	99	17.95	104	13.56	
9617	Taz	-1.32	120	19.47	111	14.71	
9618	Pbx2	-1.32	72	24.02	50	18.14	
9619	Sgsm2	-1.32	408	22.19	407	16.75	
9620	Tbc1d13	-1.32	120	14.15	126	10.68	
9621	Hk1	-1.32	241	27.81	258	20.99	
9622	Fam222b	-1.33	179	9.63	222	7.26	
9623	Ltbp1	-1.33	683	32.53	712	24.53	
9624	Mapk14	-1.33	383	23.26	430	17.54	
9625	Fam149b1	-1.33	198	17.96	238	13.54	
9626	Clasp2	-1.33	584	26.79	602	20.2	
9627	Usp36	-1.33	198	9.05	216	6.83	
9628	Vta1	-1.33	139	31.75	167	23.93	
9629	7SK_212	-1.33	102	398.17	166	300.13	
9630	Soga1	-1.33	368	19.13	378	14.42	
9631	Dnm2	-1.33	338	24.42	366	18.4	
9632	Aup1	-1.33	148	32.57	149	24.54	
9633	GImp	-1.33	132	92.94	95	70	
9634	Grk6	-1.33	147	9.01	147	6.78	
9635	Psmc4	-1.33	286	72.31	296	54.44	
9636	Abca1	-1.33	377	15.51	393	11.68	
9637	Ifnar2	-1.33	213	30.87	237	23.23	
9638	Aar2	-1.33	171	14.52	164	10.93	
9639	Abcf2	-1.33	148	20.28	127	15.25	
9640	Rpa1	-1.33	195	19.28	195	14.5	
9641	Prdx3	-1.33	178	40.56	178	30.5	
9642	Enpp5	-1.33	186	28.86	192	21.71	
9643	Sgcb	-1.33	209	18.35	231	13.79	
9644	Cyc1	-1.33	216	63.32	220	47.57	
9645	Pigk	-1.33	256	52.06	268	39.1	
9646	Ddx39b	-1.34	330	65.84	329	49.28	
9647	5S_rRNA_148	-1.34	0	3.04	0	2.27	
9648	AABR07002001.1	-1.34	1	0.3	1	0.23	
9649	AABR07006258.1	-1.34	0	0.71	0	0.53	
9650	AABR07006894.1	-1.34	9	1.14	10	0.85	
9651	AABR07048637.1	-1.34	1	0.07	1	0.05	
9652	AABR07066516.1	-1.34	2	1.41	2	1.06	
9653	Bend6	-1.34	6	0.36	6	0.27	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9654	Camkk1	-1.34	5	0.57	4	0.43	
9655	Ccna1	-1.34	1	0.2	1	0.15	
9656	Ccnd1	-1.34	1	0.09	2	0.07	
9657	Cdc42ep5	-1.34	2	1.38	2	1.03	
9658	Cmpk2	-1.34	13	1.23	13	0.92	
9659	Cnga1	-1.34	1	0.18	2	0.13	
9660	Ddb2	-1.34	35	2.95	44	2.21	
9661	Ddx28	-1.34	29	5.44	29	4.07	
9662	Dqx1	-1.34	6	0.83	7	0.62	
9663	Fndc3c1	-1.34	4	0.26	5	0.19	
9664	Gabra1	-1.34	2	0.08	1	0.06	
9665	Gpihbp1	-1.34	1	0.44	1	0.33	
9666	Gramd1c_1	-1.34	5	0.76	6	0.57	
9667	Hmgb1-ps3	-1.34	0	0.57	0	0.42	
9668	Igflr1	-1.34	2	0.59	3	0.44	
9669	Kdf1	-1.34	4	0.21	1	0.16	
9670	Letmd1	-1.34	88	10.82	96	8.09	
9671	LOC100910318_1	-1.34	10	11.66	21	8.72	
9672	LOC102555727	-1.34	0	0.35	0	0.26	
9673	LOC685067	-1.34	1	0.19	1	0.14	
9674	Mier2	-1.34	134	12.33	150	9.22	
9675	Nelfe	-1.34	50	11.03	56	8.25	
9676	Nlrc3	-1.34	11	0.11	10	0.08	
9677	Nt5c1b	-1.34	1	0.18	3	0.13	
9678	Pigw	-1.34	20	4.8	20	3.59	
9679	Plgrkt	-1.34	20	4.24	18	3.17	
9680	Polr1e	-1.34	19	2.69	21	2.01	
9681	Prf1	-1.34	1	0.14	0	0.11	
9682	Psmc10	-1.34	7	1.38	8	1.03	
9683	Ptch2	-1.34	6	0.22	4	0.17	
9684	Rbm46	-1.34	4	0.61	7	0.45	
9685	RGD1311447	-1.34	5	0.77	12	0.58	
9686	Rn60_20_0051.7	-1.34	0	0.55	1	0.41	
9687	Sall1	-1.34	2	0.07	2	0.05	
9688	Sall4	-1.34	1	0.11	3	0.08	
9689	Slc29a4	-1.34	2	0.3	3	0.23	
9690	Slco2b1	-1.34	4	0.08	3	0.06	
9691	SNORA73_5	-1.34	0	1.77	0	1.33	
9692	SNORD11B	-1.34	0	9.05	0	6.77	
9693	Ttc39c	-1.34	62	6.08	63	4.54	
9694	Urad	-1.34	1	0.71	1	0.53	
9695	Zfp791	-1.34	3	0.19	1	0.14	
9696	3082ex4-5	-1.34	6	6.94	6	5.19	
9697	5_8S_rRNA_27	-1.34	0	9.47	0	7.08	
9698	5_8S_rRNA_7	-1.34	1	2.37	1	1.77	
9699	5S_rRNA_188	-1.34	0	15.21	0	11.37	
9700	7SK_111	-1.34	0	1.14	1	0.85	
9701	AABR07000670.1	-1.34	3	1.33	4	0.99	
9702	AABR07001512.1	-1.34	1	0.68	1	0.51	
9703	AABR07001591.1	-1.34	4	0.54	4	0.4	
9704	AABR07002010.1	-1.34	6	0.35	6	0.26	
9705	AABR07002493.1	-1.34	11	0.45	15	0.33	
9706	AABR07003017.1	-1.34	0	1.63	0	1.22	
9707	AABR07004799.1	-1.34	1	1.11	0	0.83	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9708	AABR07006458.1	-1.34	19	5.01	22	3.74	
9709	AABR07008097.1	-1.34	0	0.3	1	0.23	
9710	AABR07009834.1	-1.34	1	1.08	1	0.81	
9711	AABR07012065.1	-1.34	24	6.97	24	5.21	
9712	AABR07013200.1	-1.34	1	0.36	1	0.27	
9713	AABR07015015.2	-1.34	1	0.8	0	0.6	
9714	AABR07016577.1	-1.34	0	1.72	0	1.29	
9715	AABR07019086.1	-1.34	11	0.62	13	0.46	
9716	AABR07021086.1	-1.34	1	0.39	1	0.29	
9717	AABR07021759.1	-1.34	0	0.77	0	0.57	
9718	AABR07024908.1	-1.34	0	3.23	0	2.42	
9719	AABR07025757.1	-1.34	1	0.33	1	0.25	
9720	AABR07026002.1	-1.34	1	0.24	1	0.18	
9721	AABR07026557.2	-1.34	4	0.24	10	0.18	
9722	AABR07028009.1	-1.34	0	0.48	1	0.36	
9723	AABR07028907.1	-1.34	3	0.29	2	0.22	
9724	AABR07028998.1	-1.34	0	0.24	1	0.18	
9725	AABR07030563.1	-1.34	0	0.74	0	0.56	
9726	AABR07030603.1	-1.34	3	3.45	3	2.58	
9727	AABR07030603.2	-1.34	2	3.22	2	2.41	
9728	AABR07030890.1	-1.34	2	0.64	1	0.48	
9729	AABR07032255.2	-1.34	0	0.83	0	0.62	
9730	AABR07032453.1	-1.34	1	0.5	0	0.37	
9731	AABR07032518.1	-1.34	1	0.49	1	0.37	
9732	AABR07034742.2	-1.34	0	3.32	0	2.48	
9733	AABR07034940.2	-1.34	37	2.05	39	1.53	
9734	AABR07035758.1	-1.34	0	0.24	1	0.18	
9735	AABR07035832.1	-1.34	6	2.19	11	1.64	
9736	AABR07036723.1	-1.34	0	1.02	0	0.76	
9737	AABR07043772.1	-1.34	3	0.8	3	0.6	
9738	AABR07044414.1	-1.34	0	0.82	0	0.61	
9739	AABR07044569.1	-1.34	4	0.21	2	0.16	
9740	AABR07045399.2	-1.34	2	0.31	1	0.23	
9741	AABR07045405.1	-1.34	5	1.68	8	1.25	
9742	AABR07049960.1	-1.34	0	0.6	0	0.45	
9743	AABR07051249.1	-1.34	2	0.32	4	0.24	
9744	AABR07052085.1	-1.34	2	0.88	1	0.66	
9745	AABR07052441.1	-1.34	7	0.14	11	0.1	
9746	AABR07053188.1	-1.34	0	1.09	0	0.81	
9747	AABR07054329.1	-1.34	1	3.35	0	2.51	
9748	AABR07055801.1	-1.34	4	3.89	5	2.91	
9749	AABR07055943.1	-1.34	0	0.33	0	0.24	
9750	AABR07058831.1	-1.34	1	1.4	1	1.04	
9751	AABR07059786.1	-1.34	0	0.54	0	0.4	
9752	AABR07060133.1	-1.34	34	0.88	67	0.66	
9753	AABR07060291.1	-1.34	1	5.25	1	3.92	
9754	AABR07060610.1	-1.34	0	3.7	0	2.77	
9755	AABR07060628.1	-1.34	0	0.59	1	0.44	
9756	AABR07062154.1	-1.34	2	0.92	2	0.69	
9757	AABR07063459.1	-1.34	1	0.98	0	0.73	
9758	AABR07063724.1	-1.34	2	0.22	2	0.16	
9759	AABR07064711.1	-1.34	1	0.68	0	0.51	
9760	AABR07068674.1	-1.34	1	0.12	1	0.09	
9761	AABR07073038.2	-1.34	17	1.31	18	0.98	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9762	Aanat	-1.34	2	0.55	2	0.41	
9763	Abcb9	-1.34	5	0.13	3	0.1	
9764	Abcc1	-1.34	1	2.48	3	1.85	
9765	Abcg2	-1.34	15	1.85	15	1.38	
9766	AC097939.1	-1.34	0	8.62	0	6.45	
9767	AC107446.2	-1.34	0	0.4	0	0.3	
9768	AC114343.2	-1.34	0	0.3	0	0.23	
9769	AC114452.1	-1.34	1	0.27	1	0.2	
9770	AC117058.1	-1.34	0	0.27	0	0.2	
9771	AC120310.3	-1.34	0	1.69	0	1.27	
9772	AC125982.1	-1.34	1	1.09	0	0.81	
9773	AC126572.4	-1.34	5	0.74	1	0.55	
9774	AC127784.1	-1.34	0	2.9	0	2.17	
9775	AC239701.1	-1.34	1	0.07	1	0.05	
9776	ACEA_U3_3	-1.34	0	1.68	0	1.25	
9777	ACEA_U3_5	-1.34	0	5.03	0	3.76	
9778	Ackr4	-1.34	0	0.36	0	0.27	
9779	Acot7	-1.34	69	9.84	78	7.35	
9780	Acpt	-1.34	7	0.24	5	0.18	
9781	Actl7b	-1.34	3	0.78	3	0.59	
9782	Actrt3	-1.34	2	0.59	2	0.44	
9783	Adam4	-1.34	1	0.15	1	0.11	
9784	Adamts4	-1.34	5	0.32	5	0.24	
9785	Adamts9	-1.34	11	0.23	9	0.17	
9786	Adat1	-1.34	31	1.36	28	1.02	
9787	Add2	-1.34	296	0.08	360	0.06	
9788	Adra2a	-1.34	5	0.65	5	0.48	
9789	Adra2c	-1.34	1	0.21	1	0.16	
9790	Aff1	-1.34	202	10.55	201	7.89	
9791	Agxt2	-1.34	2	0.16	3	0.12	
9792	Ak4	-1.34	11	2.83	15	2.11	
9793	Akap6	-1.34	24	0.04	11	0.03	
9794	Aldoc	-1.34	16	3.44	16	2.57	
9795	Alkbh7	-1.34	15	4.02	12	3	
9796	Alox12	-1.34	1	0.12	2	0.09	
9797	Alox15	-1.34	1	0.16	1	0.12	
9798	Alpk2	-1.34	4	0.06	2	0.04	
9799	Amica1	-1.34	5	0.67	5	0.5	
9800	Angptl6	-1.34	1	0.23	2	0.17	
9801	Ankrd33b	-1.34	5	0.18	3	0.14	
9802	Ankrd34a	-1.34	3	0.38	3	0.28	
9803	Ankrd39	-1.34	8	0.54	10	0.4	
9804	Apba3	-1.34	101	17.51	103	13.09	
9805	Apip	-1.34	6	1.49	8	1.12	
9806	Apln	-1.34	4	0.35	4	0.26	
9807	Aqp11	-1.34	1	0.28	3	0.21	
9808	Arhgap19	-1.34	42	2.86	45	2.14	
9809	Arhgap26	-1.34	37	0.96	44	0.72	
9810	Arhgap8	-1.34	4	0.14	2	0.11	
9811	Arhgef15	-1.34	1	0.09	3	0.06	
9812	Arhgef3	-1.34	80	2.62	95	1.96	
9813	Arhgef33	-1.34	4	0.14	6	0.11	
9814	Armxc1_1	-1.34	0	0.41	0	0.31	
9815	Arrdc3	-1.34	53	11.22	54	8.39	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9816	Arsj	-1.34	1	0.26	1	0.19	
9817	Asb13	-1.34	32	5.32	42	3.97	
9818	Asf1b	-1.34	15	3.2	17	2.39	
9819	Atg9a	-1.34	262	22.08	261	16.51	
9820	Atn1	-1.34	0	0.71	1	0.53	
9821	Atp5s	-1.34	14	1.82	22	1.36	
9822	Atp5sl	-1.34	50	6.47	42	4.83	
9823	Atp6v1b1	-1.34	8	0.24	15	0.18	
9824	Atp7b	-1.34	10	0.42	10	0.32	
9825	Atrip	-1.34	46	5.06	40	3.78	
9826	Axin2	-1.34	12	0.82	10	0.61	
9827	AY172581.5	-1.34	1	5.32	1	3.98	
9828	Bbip1	-1.34	1	1.8	3	1.35	
9829	Bbox1	-1.34	1	0.15	1	0.12	
9830	Bbs5	-1.34	37	3.71	25	2.77	
9831	Bdkrb2	-1.34	2	0.18	8	0.13	
9832	Bfsp1	-1.34	2	0.17	2	0.13	
9833	Bik	-1.34	3	0.38	3	0.28	
9834	Brat1	-1.34	16	2.36	14	1.76	
9835	Brinp1	-1.34	8	0.22	8	0.17	
9836	Btnl5_2	-1.34	0	0.39	0	0.29	
9837	C1ql3	-1.34	2	0.47	5	0.35	
9838	C1qtnf5	-1.34	1	0.27	1	0.2	
9839	C2_1	-1.34	1	0.22	0	0.16	
9840	C5ar2	-1.34	1	0.28	4	0.21	
9841	Cacna1b	-1.34	5	0.04	1	0.03	
9842	Cacna1e	-1.34	46	0.05	75	0.04	
9843	Cadps	-1.34	29	0.63	28	0.47	
9844	Capg	-1.34	22	5.15	22	3.85	
9845	Capn8	-1.34	6	0.11	3	0.08	
9846	Car11	-1.34	13	1.36	9	1.02	
9847	Carns1	-1.34	4	0.38	3	0.28	
9848	Ccbl1	-1.34	52	11.24	50	8.41	
9849	Ccdc18	-1.34	18	0.5	23	0.37	
9850	Ccdc88b	-1.34	2	0.06	2	0.05	
9851	Ccdc96	-1.34	1	0.2	1	0.15	
9852	Ccno	-1.34	1	0.19	1	0.14	
9853	Cd4	-1.34	1	0.21	5	0.15	
9854	Cdh6	-1.34	2	0.15	2	0.11	
9855	Cdnf	-1.34	1	0.13	5	0.1	
9856	Ceacam10_2	-1.34	0	0.5	0	0.37	
9857	Celsr1	-1.34	52	1.83	55	1.37	
9858	Celsr3	-1.34	2	0.03	2	0.02	
9859	Cenpo	-1.34	6	1.86	5	1.39	
9860	Cenpv	-1.34	91	13.94	100	10.43	
9861	Cercam	-1.34	15	1.86	16	1.39	
9862	Cers4	-1.34	74	6.7	78	5.01	
9863	Cfd	-1.34	1	0.38	0	0.29	
9864	Chic1	-1.34	29	1.23	36	0.92	
9865	Clca4l	-1.34	4	0.13	4	0.09	
9866	Cmklr1	-1.34	1	0.14	1	0.11	
9867	Cnr2	-1.34	2	0.24	2	0.18	
9868	Cntnap3	-1.34	29	2.28	26	1.71	
9869	Col9a2	-1.34	6	0.12	11	0.09	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9870	Commd2	-1.34	52	7.9	55	5.91	
9871	Coprs	-1.34	9	5.25	13	3.92	
9872	Coro2a	-1.34	1	0.15	2	0.12	
9873	Cox6b1_2	-1.34	8	15.26	8	11.41	
9874	Crb2	-1.34	5	0.38	5	0.28	
9875	Crhr2	-1.34	2	0.12	1	0.09	
9876	Cryba1	-1.34	4	0.47	10	0.35	
9877	Cryba4	-1.34	1	0.45	1	0.34	
9878	Csf1r	-1.34	4	0.27	12	0.2	
9879	Cthrc1	-1.34	2	0.6	2	0.45	
9880	Ctnnd2	-1.34	14	0.08	11	0.06	
9881	Cyb5rl	-1.34	8	1.12	5	0.84	
9882	Cyp4f37_1	-1.34	0	0.46	0	0.34	
9883	Dact2	-1.34	2	0.23	3	0.17	
9884	Dclk2	-1.34	29	0.95	49	0.71	
9885	Ddx25	-1.34	30	5.67	30	4.24	
9886	Ddx58	-1.34	22	3.63	27	2.72	
9887	Ddx60	-1.34	3	0.09	4	0.07	
9888	Dhx16	-1.34	91	7.73	87	5.78	
9889	Dmrtc1a	-1.34	1	0.33	1	0.25	
9890	Dnase1l2	-1.34	2	0.87	2	0.65	
9891	Dok6	-1.34	26	0.5	43	0.37	
9892	Dpp4	-1.34	2	0.07	2	0.06	
9893	Dram1	-1.34	7	0.92	10	0.69	
9894	Dusp14	-1.34	3	0.96	6	0.72	
9895	Dusp9	-1.34	1	0.14	1	0.1	
9896	Dync1i1	-1.34	15	0.68	17	0.51	
9897	Ebi3	-1.34	1	0.3	1	0.22	
9898	Edil3	-1.34	15	0.82	26	0.61	
9899	Efcab1	-1.34	1	0.3	1	0.23	
9900	Efhc2	-1.34	7	0.25	8	0.19	
9901	Egf	-1.34	2	0.17	1	0.13	
9902	Egr3	-1.34	2	0.27	2	0.2	
9903	Eno4	-1.34	1	0.15	3	0.11	
9904	Enpp3	-1.34	4	0.26	4	0.2	
9905	Entpd2	-1.34	4	0.38	4	0.28	
9906	Entpd8	-1.34	1	0.07	3	0.05	
9907	Epha4	-1.34	17	0.63	14	0.47	
9908	Epm2a	-1.34	8	0.63	10	0.47	
9909	Eqtn	-1.34	1	0.35	1	0.26	
9910	Ero1lb	-1.34	11	1.12	12	0.84	
9911	Esyt3	-1.34	6	0.31	8	0.23	
9912	Exoc7_1	-1.34	0	3.32	0	2.48	
9913	Fam134b_2	-1.34	0	0.69	0	0.52	
9914	Fam160b2	-1.34	189	15.51	181	11.59	
9915	Fam173a	-1.34	26	7.32	31	5.47	
9916	Fam212b	-1.34	7	0.64	6	0.48	
9917	Fam217a	-1.34	1	0.24	4	0.18	
9918	Fam57b	-1.34	2	0.21	2	0.16	
9919	Far2	-1.34	8	0.25	8	0.19	
9920	Fblim1	-1.34	5	0.36	4	0.27	
9921	Fbxl22	-1.34	2	0.08	8	0.06	
9922	Fbxw12	-1.34	2	0.25	1	0.19	
9923	Fgf2	-1.34	1	0.29	2	0.21	



Supplemental Table 3  
FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9924	Foxo6	-1.34	4	0.19	2	0.14	
9925	Fsbp	-1.34	1	0.81	0	0.6	
9926	Fstl3	-1.34	5	0.95	5	0.71	
9927	Fuom	-1.34	0	0.16	0	0.12	
9928	Fxyd1	-1.34	1	0.68	1	0.51	
9929	Gabrb2	-1.34	7	0.17	6	0.13	
9930	Galnt12	-1.34	5	1.04	8	0.78	
9931	Galnt14	-1.34	8	0.16	10	0.12	
9932	Galnt16	-1.34	26	1.22	51	0.91	
9933	Galnt18	-1.34	14	0.29	11	0.22	
9934	Galnt3	-1.34	6	0.48	6	0.36	
9935	Garnl3	-1.34	22	1.16	37	0.87	
9936	Gata3	-1.34	7	0.68	8	0.51	
9937	Gdf6	-1.34	3	0.31	3	0.23	
9938	Gfod1	-1.34	22	3.44	61	2.57	
9939	Gfod2	-1.34	55	4.08	72	3.05	
9940	Gins3	-1.34	20	2.88	21	2.15	
9941	Glr3	-1.34	152	31.01	167	23.19	
9942	Gm1045	-1.34	2	1.9	4	1.42	
9943	Gmnc	-1.34	1	0.13	1	0.1	
9944	Gne	-1.34	95	9.54	94	7.14	
9945	Gpr156	-1.34	7	0.15	9	0.11	
9946	Gprin2	-1.34	2	0.53	2	0.4	
9947	Gramd4	-1.34	21	1.41	21	1.06	
9948	Grb7	-1.34	2	0.13	2	0.09	
9949	Grm8	-1.34	33	0.09	41	0.07	
9950	Has1	-1.34	14	0.86	16	0.65	
9951	Hbq1b	-1.34	9	7.54	10	5.64	
9952	Hcn3	-1.34	7	0.45	6	0.34	
9953	Hdx	-1.34	15	1.12	21	0.84	
9954	Hk3	-1.34	1	0.11	1	0.08	
9955	Hoxc8	-1.34	2	0.34	3	0.25	
9956	Hspa12b	-1.34	6	0.3	6	0.23	
9957	Iba57	-1.34	57	3.78	71	2.83	
9958	Ift22	-1.34	32	6.65	38	4.97	
9959	Igf2bp1	-1.34	2	0.17	2	0.13	
9960	Ikzf4	-1.34	10	1.44	12	1.08	
9961	Il18	-1.34	8	0.72	11	0.54	
9962	Il1rn	-1.34	2	0.18	1	0.13	
9963	Il27ra	-1.34	21	1.28	20	0.96	
9964	Inpp1	-1.34	43	2.91	48	2.18	
9965	Iqch	-1.34	31	0.18	28	0.14	
9966	Irgb2	-1.34	3	0.11	2	0.09	
9967	Jph1	-1.34	31	1.62	37	1.21	
9968	Kank3	-1.34	12	1.21	13	0.9	
9969	Kank4	-1.34	10	0.23	8	0.17	
9970	Katna1	-1.34	62	6.62	88	4.95	
9971	Kazald1	-1.34	7	1.12	7	0.83	
9972	Kbtbd6_2	-1.34	0	1.03	0	0.77	
9973	Kcng4	-1.34	1	0.09	1	0.07	
9974	Kcnip3	-1.34	8	0.58	6	0.43	
9975	Kctd1	-1.34	150	8.65	138	6.47	
9976	Kif22	-1.34	68	9.07	67	6.78	
9977	Kiss1	-1.34	3	0.37	4	0.28	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
9978	Klf1	-1.34	4	0.48	4	0.36	
9979	Klk5l_2	-1.34	0	0.52	0	0.39	
9980	Kpna5	-1.34	72	4.19	92	3.13	
9981	Lama3	-1.34	5	0.14	3	0.1	
9982	Lamb3	-1.34	3	0.17	3	0.13	
9983	Ldlrad1	-1.34	10	1.75	15	1.31	
9984	Lenep	-1.34	1	1.24	0	0.93	
9985	Leng9	-1.34	11	1.74	9	1.3	
9986	Leprot	-1.34	24	14.71	19	11	
9987	Lfng	-1.34	3	0.34	4	0.25	
9988	Lmx1b	-1.34	5	0.3	2	0.23	
9989	LOC100360002	-1.34	0	4.7	0	3.52	
9990	LOC100360200	-1.34	1	0.69	1	0.52	
9991	LOC100360274	-1.34	102	0.35	201	0.26	
9992	LOC100360432_1	-1.34	0	2.17	0	1.62	
9993	LOC100360432_2	-1.34	0	3.77	0	2.82	
9994	LOC100360835	-1.34	5	5.32	3	3.98	
9995	LOC100360843	-1.34	0	0.82	0	0.61	
9996	LOC100361060	-1.34	0	4.51	0	3.37	
9997	LOC100361079	-1.34	0	2.39	0	1.79	
9998	LOC100362298	-1.34	0	8.68	0	6.49	
9999	LOC100363043	-1.34	107	34.72	110	25.96	
10000	LOC100363268	-1.34	1	1.13	0	0.84	
10001	LOC100366140_2	-1.34	0	0.23	0	0.17	
10002	LOC100910214	-1.34	0	0.24	0	0.18	
10003	LOC100910308	-1.34	0	0.33	0	0.25	
10004	LOC100910316	-1.34	2	0.71	2	0.53	
10005	LOC100910472	-1.34	10	7.71	8	5.76	
10006	LOC100910526_2	-1.34	1	0.12	0	0.09	
10007	LOC100911145	-1.34	0	0.15	0	0.11	
10008	LOC100911337	-1.34	0	1.92	0	1.43	
10009	LOC100911456	-1.34	0	0.62	0	0.46	
10010	LOC100911951	-1.34	0	0.14	0	0.11	
10011	LOC100912609_2	-1.34	0	0.54	0	0.4	
10012	LOC102551255	-1.34	1	0.48	1	0.36	
10013	LOC103689982	-1.34	23	8.87	20	6.63	
10014	LOC307727	-1.34	1	1.16	1	0.87	
10015	LOC498300	-1.34	2	0.41	3	0.31	
10016	LOC500148	-1.34	1	0.28	2	0.21	
10017	LOC679247	-1.34	2	0.52	3	0.39	
10018	LOC679683	-1.34	1	2.25	0	1.68	
10019	LOC681338	-1.34	0	0.96	0	0.72	
10020	LOC681458	-1.34	4	0.3	5	0.23	
10021	LOC685431_2	-1.34	0	1.39	2	1.04	
10022	LOC688286	-1.34	14	0.91	8	0.68	
10023	LOC688672	-1.34	1	1.19	2	0.89	
10024	LOC690276	-1.34	3	0.52	6	0.39	
10025	LOC691422	-1.34	13	2.42	13	1.81	
10026	Loxl4	-1.34	4	0.25	2	0.18	
10027	Lrrc14b	-1.34	7	0.98	9	0.74	
10028	Lrrc32	-1.34	1	0.09	1	0.07	
10029	Lrrc39	-1.34	3	0.5	13	0.38	
10030	Lypd3	-1.34	5	1.08	5	0.8	
10031	Lypla2	-1.34	92	20.49	88	15.32	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10032	Mad111	-1.34	96	5.96	92	4.46	
10033	Mag	-1.34	3	0.42	4	0.32	
10034	Magi2	-1.34	70	0.69	66	0.52	
10035	Mak	-1.34	3	0.22	2	0.17	
10036	March9	-1.34	16	6.83	21	5.11	
10037	Mecom	-1.34	1	0.07	2	0.06	
10038	Metrn	-1.34	3	1.18	3	0.88	
10039	MGC116197	-1.34	1	0.26	1	0.19	
10040	Micalcl	-1.34	23	1.74	25	1.3	
10041	Mmp19	-1.34	40	7.22	44	5.4	
10042	Mmp2	-1.34	9	1.06	9	0.79	
10043	Mobp	-1.34	2	0.09	1	0.07	
10044	Mogat1	-1.34	2	0.9	3	0.68	
10045	Morn4	-1.34	32	6.41	34	4.79	
10046	Mroh2a	-1.34	7	0.07	5	0.05	
10047	Mrpl35	-1.34	49	10.66	53	7.97	
10048	mrt3	-1.34	1	1.22	1	0.91	
10049	Msl3l2	-1.34	0	0.24	0	0.18	
10050	Mtbp	-1.34	42	2.97	39	2.22	
10051	Murc	-1.34	1	0.09	2	0.07	
10052	Myh14	-1.34	3	0.16	7	0.12	
10053	Mylk3	-1.34	2	0.13	4	0.1	
10054	Myo16	-1.34	11	0.05	9	0.04	
10055	Myo1g	-1.34	1	0.11	2	0.08	
10056	Mypn	-1.34	1	0.07	3	0.05	
10057	Naa10	-1.34	32	8.11	42	6.06	
10058	Ncapg	-1.34	42	2.38	47	1.78	
10059	Ncf2	-1.34	8	0.76	6	0.57	
10060	Ndufaf7	-1.34	20	2.6	23	1.94	
10061	Ndufv1	-1.34	141	30.49	141	22.8	
10062	Necab2	-1.34	3	0.23	5	0.17	
10063	Nefh	-1.34	4	0.38	4	0.28	
10064	Nefm	-1.34	4	0.47	4	0.35	
10065	Neu2	-1.34	4	0.2	2	0.15	
10066	Neurl1b	-1.34	3	0.44	6	0.33	
10067	Ngfr	-1.34	1	0.11	1	0.08	
10068	Nlrp5	-1.34	5	0.37	4	0.28	
10069	Nme5	-1.34	5	0.24	8	0.18	
10070	Nmi	-1.34	35	13.37	52	10	
10071	Nmnat3	-1.34	6	0.17	6	0.13	
10072	Nol4	-1.34	9	0.07	5	0.05	
10073	Npffr1	-1.34	1	0.28	2	0.21	
10074	Npm2	-1.34	2	1.16	2	0.87	
10075	Nptx1	-1.34	6	0.46	6	0.34	
10076	Nrcam	-1.34	2	0.05	4	0.04	
10077	Ntf4	-1.34	1	0.27	1	0.2	
10078	Ntng2	-1.34	1	0.14	3	0.11	
10079	Nubp2	-1.34	83	20.58	81	15.38	
10080	Nuf2	-1.34	32	4.98	34	3.72	
10081	Oas1k	-1.34	7	0.28	10	0.21	
10082	Ocel1	-1.34	6	1.71	6	1.28	
10083	Olr1129	-1.34	1	0.38	1	0.28	
10084	Olr1461	-1.34	2	0.78	2	0.58	
10085	Olr201	-1.34	1	0.38	1	0.29	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10086	Ooep	-1.34	3	1.33	3	1	
10087	Orc1	-1.34	34	1.84	44	1.38	
10088	Oxld1	-1.34	9	3.45	8	2.58	
10089	P2rx3	-1.34	4	0.28	6	0.21	
10090	Paip2l1	-1.34	0	0.97	0	0.73	
10091	Pak6	-1.34	6	0.15	3	0.12	
10092	Papd7	-1.34	139	12.42	158	9.29	
10093	Paqr7	-1.34	120	17.03	126	12.73	
10094	Parvb	-1.34	12	0.67	13	0.5	
10095	Pcdhb9	-1.34	4	0.57	4	0.43	
10096	Pcnxl2	-1.34	7	0.06	4	0.04	
10097	Pcsk1n	-1.34	0	0.46	0	0.35	
10098	Pde2a	-1.34	2	0.08	1	0.06	
10099	Pde6b	-1.34	5	0.13	2	0.1	
10100	Pde9a	-1.34	18	1.28	15	0.96	
10101	Pdyn	-1.34	1	0.15	1	0.11	
10102	Pdzd9	-1.34	3	0.31	5	0.23	
10103	Pfkl	-1.34	238	29.2	237	21.83	
10104	Pgbd5	-1.34	6	0.18	3	0.13	
10105	Pgs1	-1.34	117	13.63	130	10.19	
10106	Phkg1	-1.34	5	0.7	4	0.52	
10107	Phtf1	-1.34	127	13.78	146	10.3	
10108	Phtf2	-1.34	141	8.58	167	6.42	
10109	Piezo1	-1.34	15	0.62	16	0.46	
10110	Pim2	-1.34	12	1.52	11	1.14	
10111	Piwil1	-1.34	2	0.18	3	0.14	
10112	Plekha6	-1.34	9	0.37	7	0.28	
10113	Plekha1	-1.34	21	0.75	36	0.56	
10114	Plekha4	-1.34	2	0.19	2	0.14	
10115	Pmp22	-1.34	22	3.84	22	2.87	
10116	Pno1	-1.34	22	9.57	13	7.16	
10117	Pnpla3	-1.34	2	0.11	4	0.08	
10118	Ppidl1	-1.34	3	0.82	2	0.61	
10119	Ppif	-1.34	65	12.71	62	9.5	
10120	Ppp1r14d	-1.34	14	0.6	13	0.45	
10121	Ppp1r36	-1.34	13	2.19	14	1.64	
10122	Ppp2r2c	-1.34	173	0.22	284	0.16	
10123	Prdm8	-1.34	4	0.7	4	0.52	
10124	Prkcg	-1.34	7	0.47	9	0.35	
10125	Prom1	-1.34	7	0.15	7	0.11	
10126	Prox1	-1.34	6	0.2	6	0.15	
10127	Ptcd2	-1.34	44	4.69	53	3.5	
10128	Ptprr	-1.34	33	0.1	26	0.07	
10129	Rab26	-1.34	8	1.09	9	0.82	
10130	Rad51b	-1.34	5	1.43	2	1.07	
10131	Ranbp3l	-1.34	1	0.17	1	0.13	
10132	Rarres2	-1.34	5	2.67	4	2	
10133	Rbm28	-1.34	107	7	109	5.23	
10134	Rcan3	-1.34	50	11.31	74	8.46	
10135	Ren	-1.34	2	0.21	1	0.16	
10136	Rfx2	-1.34	8	0.44	6	0.33	
10137	Rfx4	-1.34	18	0.34	31	0.26	
10138	Rgag1	-1.34	1	0.09	1	0.07	
10139	RGD1304587	-1.34	36	10.02	36	7.49	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10140	RGD1305537_2	-1.34	0	0.21	0	0.16	
10141	RGD1306186	-1.34	3	0.19	4	0.14	
10142	RGD1311805	-1.34	142	19.81	148	14.81	
10143	RGD1359634	-1.34	4	2.22	4	1.66	
10144	RGD1559951	-1.34	1	1.11	1	0.83	
10145	RGD1560324	-1.34	1	0.09	1	0.07	
10146	RGD1562200	-1.34	13	1.29	8	0.97	
10147	RGD1562469	-1.34	0	0.75	0	0.56	
10148	RGD1564149	-1.34	1	0.24	1	0.18	
10149	RGD1564370	-1.34	0	0.9	0	0.68	
10150	RGD1564552	-1.34	0	0.75	1	0.56	
10151	RGD1564606	-1.34	0	1.54	0	1.15	
10152	RGD1564980	-1.34	1	0.77	0	0.57	
10153	RGD1565512	-1.34	2	0.12	2	0.09	
10154	RGD1566239	-1.34	29	9.17	23	6.86	
10155	RGD1624210	-1.34	6	0.47	4	0.35	
10156	Rmi2	-1.34	1	0.8	2	0.6	
10157	Rn60_10_0698.6	-1.34	0	2.3	0	1.72	
10158	Rn60_14_0474.1	-1.34	0	0.17	1	0.12	
10159	Rn60_15_0083.1	-1.34	0	0.47	0	0.35	
10160	Rn60_15_0538.1	-1.34	1	0.43	1	0.32	
10161	Rn60_20_0032.5	-1.34	38	0.97	35	0.73	
10162	Rn60_20_0041.1	-1.34	0	0.65	0	0.48	
10163	Rn60_20_0055.15	-1.34	0	1.45	0	1.08	
10164	Rn60_2_1764.2	-1.34	2	0.33	1	0.25	
10165	Rn60_7_0716.1	-1.34	0	0.2	0	0.15	
10166	Rn60_X_0713.4	-1.34	1	0.61	1	0.46	
10167	Rn60_X_0752.1	-1.34	0	0.9	0	0.67	
10168	Rnf125	-1.34	1	0.26	1	0.2	
10169	Rnf170	-1.34	42	11.85	50	8.86	
10170	Rnf207	-1.34	1	0.15	4	0.11	
10171	Rnf24	-1.34	6	6.96	8	5.21	
10172	Rnf32	-1.34	11	0.46	16	0.35	
10173	Rom1	-1.34	4	0.94	4	0.7	
10174	Rpl39_5	-1.34	0	13.93	0	10.41	
10175	Rplp2	-1.34	0	7.28	0	5.44	
10176	Rps10_1	-1.34	18	40.71	21	30.44	
10177	Rps27a	-1.34	3	32.29	3	24.14	
10178	Rps6ka1	-1.34	17	1.4	15	1.05	
10179	Rrm2b	-1.34	20	1.81	23	1.35	
10180	Rsad2	-1.34	2	0.2	3	0.15	
10181	Rundc3a	-1.34	9	1.06	7	0.79	
10182	Sac3d1	-1.34	23	5.94	25	4.44	
10183	Sat2	-1.34	19	6.47	20	4.84	
10184	Sbk2	-1.34	2	0.15	1	0.12	
10185	Scd4	-1.34	3	0.64	2	0.48	
10186	Sdk2	-1.34	7	0.05	13	0.04	
10187	Sema4f	-1.34	5	0.36	5	0.27	
10188	Serp2	-1.34	13	1.48	8	1.11	
10189	Sh2d3c	-1.34	4	0.33	3	0.25	
10190	Shisa6	-1.34	12	0.46	9	0.35	
10191	Shkbp1	-1.34	54	6.73	50	5.03	
10192	Sidt1	-1.34	2	0.06	4	0.05	
10193	Sin3b	-1.34	237	72.87	230	54.48	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10194	Sirt4	-1.34	6	1.28	11	0.96	
10195	Siva1	-1.34	36	6.35	39	4.75	
10196	Ska1	-1.34	14	1.41	14	1.05	
10197	Skor2	-1.34	1	0.12	0	0.09	
10198	Slc14a2_1	-1.34	1	0.12	1	0.09	
10199	Slc15a2	-1.34	1	0.09	1	0.07	
10200	Slc16a4	-1.34	48	0.18	69	0.13	
10201	Slc25a26	-1.34	37	3.26	58	2.44	
10202	Slc2a4	-1.34	2	0.14	1	0.11	
10203	Slc39a8	-1.34	10	0.89	11	0.67	
10204	Slc44a5	-1.34	16	0.08	9	0.06	
10205	Slc6a5	-1.34	5	0.05	2	0.04	
10206	Slc9b2	-1.34	2	0.18	3	0.14	
10207	Slco6d1_1	-1.34	1	0.15	1	0.11	
10208	Slitrk3	-1.34	2	0.22	2	0.16	
10209	snopsi28S-3327	-1.34	0	5.29	0	3.95	
10210	SNORA30_2	-1.34	0	2.7	0	2.02	
10211	SNORD113_20	-1.34	1	7.62	2	5.7	
10212	SNORD19	-1.34	0	4.7	0	3.52	
10213	SNORD2	-1.34	0	5.25	0	3.92	
10214	SNORD24_1	-1.34	0	14.48	0	10.83	
10215	SNORD34_1	-1.34	0	5.4	0	4.04	
10216	SNORD83_1	-1.34	0	9.66	0	7.22	
10217	SNORD95_1	-1.34	0	10.81	0	8.08	
10218	Sox7	-1.34	1	0.11	1	0.08	
10219	Sp6	-1.34	2	0.36	2	0.27	
10220	Spatc1	-1.34	7	0.23	7	0.17	
10221	Spdye4_2	-1.34	1	0.6	0	0.45	
10222	Spink13	-1.34	92	1.66	161	1.24	
10223	Spr	-1.34	15	9.34	22	6.98	
10224	Sptlc3	-1.34	6	0.12	6	0.09	
10225	Srpk3	-1.34	3	0.18	1	0.13	
10226	Ss18l2	-1.34	12	5.42	12	4.05	
10227	Sstr2	-1.34	1	0.17	1	0.13	
10228	St6galnac2	-1.34	3	0.36	3	0.27	
10229	St8sia5	-1.34	4	0.24	3	0.18	
10230	Stap1	-1.34	11	0.27	12	0.2	
10231	Stard10	-1.34	16	3.64	18	2.72	
10232	Stk31	-1.34	3	0.1	3	0.08	
10233	Stk32a	-1.34	4	0.14	3	0.11	
10234	Stmn2	-1.34	2	0.18	2	0.13	
10235	Strip2	-1.34	3	0.14	5	0.11	
10236	Stx8	-1.34	90	13.78	152	10.3	
10237	Sult1b1	-1.34	1	0.28	2	0.21	
10238	Sult1d1	-1.34	2	0.14	5	0.1	
10239	Syce1l	-1.34	24	5.29	25	3.96	
10240	Sycp3	-1.34	28	0.66	29	0.49	
10241	Syngn4	-1.34	4	0.23	2	0.17	
10242	Tango2	-1.34	180	15	208	11.22	
10243	Tbx19	-1.34	9	0.28	13	0.21	
10244	Tdrd6	-1.34	1	0.05	1	0.04	
10245	Tecpr2	-1.34	105	4.73	137	3.53	
10246	Tfam	-1.34	86	17.39	101	13	
10247	Tfb2m	-1.34	28	7.88	33	5.89	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10248	Tgif2-ps1	-1.34	0	0.51	0	0.38	
10249	Tgm1	-1.34	1	0.11	1	0.08	
10250	Tgm5	-1.34	2	0.17	1	0.13	
10251	Thoc5	-1.34	167	23.24	170	17.37	
10252	Tigd4	-1.34	1	0.16	1	0.12	
10253	Timm23b	-1.34	1	0.57	0	0.43	
10254	Tln2	-1.34	65	1.88	62	1.41	
10255	Tm4sf20	-1.34	4	0.24	7	0.18	
10256	Tmc8	-1.34	3	0.27	5	0.2	
10257	Tmem100	-1.34	1	0.26	1	0.19	
10258	Tmem106c	-1.34	53	13.2	55	9.87	
10259	Tmem117	-1.34	19	1.14	10	0.85	
10260	Tmem130	-1.34	5	0.39	3	0.29	
10261	Tmem132b	-1.34	67	0.13	78	0.1	
10262	Tmem132d	-1.34	23	0.11	21	0.08	
10263	Tmem132e	-1.34	3	0.08	1	0.06	
10264	Tmem143	-1.34	51	4.55	57	3.4	
10265	Tmem150b	-1.34	11	1.13	13	0.84	
10266	Tmem156	-1.34	6	0.21	2	0.16	
10267	Tmem240	-1.34	6	1.39	8	1.04	
10268	Tmem256	-1.34	15	16.78	16	12.55	
10269	Tnfaip6	-1.34	22	5.05	22	3.77	
10270	Tnfsf11_1	-1.34	0	0.38	0	0.28	
10271	Tp53tg5	-1.34	2	0.35	3	0.26	
10272	Triap1	-1.34	0	1.57	0	1.17	
10273	Trim14	-1.34	4	0.3	6	0.22	
10274	Trim17	-1.34	26	1.48	17	1.11	
10275	Trim43a	-1.34	2	0.53	2	0.4	
10276	Trim65	-1.34	36	3.87	37	2.9	
10277	Trim72	-1.34	2	0.15	2	0.11	
10278	Ttl9	-1.34	6	0.21	5	0.15	
10279	Tuba3a	-1.34	1	0.24	1	0.18	
10280	Tuba3b	-1.34	2	0.46	1	0.34	
10281	Tusc5	-1.34	1	0.11	1	0.08	
10282	Upp1	-1.34	4	0.18	1	0.13	
10283	UST4r	-1.34	2897	0.18	2661	0.13	
10284	Vstm2l	-1.34	5	0.55	2	0.41	
10285	Vwa7	-1.34	6	0.24	4	0.18	
10286	Wbp2nl	-1.34	2	0.17	2	0.12	
10287	Wdr72	-1.34	3	0.11	2	0.08	
10288	Wnt10a	-1.34	1	0.15	1	0.11	
10289	Wnt5b	-1.34	9	0.98	11	0.74	
10290	Wnt9a	-1.34	8	0.59	5	0.44	
10291	Xylb	-1.34	82	5.46	86	4.08	
10292	Zbtb3	-1.34	17	3.04	17	2.27	
10293	Zbtb37	-1.34	23	2.49	32	1.86	
10294	Zc3h8	-1.34	27	3.47	30	2.59	
10295	Zdhhc18	-1.34	55	12.43	70	9.3	
10296	Zfp110	-1.34	58	5.72	65	4.28	
10297	Zfp14	-1.34	0	0.48	0	0.36	
10298	Zfp260_1	-1.34	0	0.22	0	0.17	
10299	Zfp385b	-1.34	444	12.36	460	9.24	
10300	Zfp511	-1.34	27	5.94	25	4.44	
10301	Zfp593	-1.34	24	4.32	24	3.23	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10302	Zfp711	-1.34	37	1.62	37	1.21	
10303	Zfp951_2	-1.34	0	0.59	0	0.44	
10304	Zmynd19	-1.34	16	10.71	19	8.01	
10305	Zp3	-1.34	4	0.82	5	0.61	
10306	7SK_174	-1.34	1	1.15	1	0.86	
10307	AABR07005506.1	-1.34	2	2.48	0	1.85	
10308	AABR07009638.1	-1.34	3	11.41	2	8.53	
10309	AABR07021930.1	-1.34	2	0.27	4	0.2	
10310	AABR07030897.1	-1.34	2	0.1	1	0.07	
10311	AABR07032520.3	-1.34	4	1.09	6	0.81	
10312	AABR07032821.1	-1.34	0	1.75	1	1.31	
10313	AABR07034293.1	-1.34	2	3.09	2	2.31	
10314	AABR07036746.1	-1.34	0	11.35	0	8.49	
10315	AABR07043365.1	-1.34	3	0.37	2	0.28	
10316	AABR07043429.1	-1.34	1	0.19	1	0.14	
10317	AABR07050487.1	-1.34	3	0.15	4	0.11	
10318	AABR07054490.1	-1.34	19	0.53	15	0.39	
10319	AABR07056183.1	-1.34	5	0.39	2	0.29	
10320	AABR07070559.1	-1.34	1	1.03	1	0.77	
10321	Abca17	-1.34	4	0.07	4	0.05	
10322	AC098763.1	-1.34	4	1.27	1	0.95	
10323	AC105470.1	-1.34	30	3.33	29	2.49	
10324	AC136795.1	-1.34	0	4.34	0	3.25	
10325	Adamts14	-1.34	2	0.07	1	0.05	
10326	Adat2	-1.34	6	0.64	5	0.48	
10327	Adgrb2	-1.34	18	1	15	0.75	
10328	Ap1g2	-1.34	26	3.26	30	2.43	
10329	Arhgap27	-1.34	3	0.14	1	0.1	
10330	Ascl2	-1.34	1	0.23	1	0.17	
10331	Bag5	-1.34	0	0.43	0	0.32	
10332	Bin2	-1.34	2	0.19	1	0.14	
10333	Btbd6	-1.34	10	2.04	6	1.53	
10334	Btn2a2	-1.34	12	1.29	13	0.97	
10335	Camk2b	-1.34	15	0.26	7	0.19	
10336	Catip	-1.34	1	0.13	2	0.1	
10337	Ccdc157	-1.34	35	2.21	42	1.65	
10338	Cd226	-1.34	1	0.07	3	0.05	
10339	Cdk18	-1.34	11	0.7	11	0.52	
10340	Cgref1	-1.34	5	0.82	3	0.61	
10341	Chrm2	-1.34	1	0.17	1	0.12	
10342	Clcn1	-1.34	3	0.11	4	0.08	
10343	Clec11a	-1.34	4	0.48	4	0.36	
10344	Cmtm8	-1.34	10	0.63	20	0.47	
10345	Cnm1	-1.34	8	0.52	18	0.39	
10346	Coro2b	-1.34	17	2.17	16	1.62	
10347	Crispld1	-1.34	6	0.49	7	0.37	
10348	Cyp2d4	-1.34	1	0.21	2	0.15	
10349	Dhrs711	-1.34	25	0.13	40	0.1	
10350	Dhrs9	-1.34	1	0.09	2	0.07	
10351	Dhx58	-1.34	5	0.55	6	0.41	
10352	Dkk1	-1.34	1	0.32	1	0.24	
10353	Dnajc6	-1.34	7	0.21	8	0.16	
10354	Dok7	-1.34	4	0.3	6	0.22	
10355	Duox1	-1.34	3	0.14	2	0.1	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10356	Dusp23	-1.34	7	2.94	8	2.2	
10357	ENSRNOG00000050	-1.34	20	4.13	24	3.08	
10358	ENSRNOG00000050	-1.34	3	0.46	3	0.34	
10359	Fam136a	-1.34	75	16.45	78	12.3	
10360	Fbln2	-1.34	4	0.25	3	0.19	
10361	Fbln7	-1.34	4	0.55	3	0.41	
10362	Flt1	-1.34	10	0.05	24	0.04	
10363	Fscn1	-1.34	12	1.96	9	1.46	
10364	Fut1	-1.34	1	0.13	1	0.1	
10365	Fxyd5	-1.34	2	0.72	3	0.54	
10366	Gli2	-1.34	20	0.46	22	0.34	
10367	Gtse1	-1.34	58	6.84	66	5.12	
10368	Heyl	-1.34	2	0.08	2	0.06	
10369	Hist1h2ah	-1.34	2	1.84	2	1.38	
10370	Hist2h2aa2_1	-1.34	0	0.92	0	0.69	
10371	Hoxd4	-1.34	2	0.13	5	0.1	
10372	Hs3st3b1	-1.34	5	0.38	7	0.29	
10373	Il17rb	-1.34	2	0.12	4	0.09	
10374	Il33	-1.34	1	0.15	1	0.11	
10375	Inpp4b	-1.34	10	0.08	12	0.06	
10376	Itga7	-1.34	5	0.29	4	0.21	
10377	Kcnk15	-1.34	5	0.61	4	0.45	
10378	Kctd13	-1.34	37	5.54	38	4.14	
10379	Klf17	-1.34	1	0.18	2	0.14	
10380	Klhl10	-1.34	6	0.36	11	0.27	
10381	Lactb2	-1.34	24	6.33	24	4.73	
10382	Lbp	-1.34	1	0.15	1	0.11	
10383	Lgals9	-1.34	5	0.47	1	0.35	
10384	LOC100362980	-1.34	0	0.32	0	0.24	
10385	LOC100366054	-1.34	2	0.29	0	0.22	
10386	LOC100909752	-1.34	2	0.21	1	0.16	
10387	LOC100910689	-1.34	1	0.87	1	0.65	
10388	LOC102548225	-1.34	5	0.64	5	0.48	
10389	LOC681367	-1.34	4	4.2	4	3.14	
10390	LOC688390	-1.34	1	0.19	1	0.14	
10391	Lpxn	-1.34	4	0.63	4	0.47	
10392	Lrp1b_2	-1.34	4	0.64	4	0.48	
10393	Lurap1	-1.34	6	1.54	9	1.15	
10394	Ly75	-1.34	2	0.07	6	0.05	
10395	Mapk11	-1.34	3	0.15	1	0.11	
10396	Mat1a	-1.34	2	0.22	2	0.16	
10397	Megf6	-1.34	3	0.08	11	0.06	
10398	Mipol1	-1.34	77	3.24	122	2.43	
10399	Mllt11	-1.34	49	7.96	60	5.95	
10400	Mzt1	-1.34	16	4.58	17	3.43	
10401	Naip6	-1.34	2	0.06	3	0.04	
10402	Npff	-1.34	6	2.46	6	1.84	
10403	Nr1i3	-1.34	21	2.17	41	1.62	
10404	Ntm	-1.34	4	0.11	4	0.08	
10405	Ntrk3	-1.34	11	0.12	8	0.09	
10406	Oip5	-1.34	8	1.06	9	0.79	
10407	Oscar	-1.34	1	0.18	2	0.13	
10408	Otogl	-1.34	6	0.06	5	0.04	
10409	Pcdhb3	-1.34	16	2.41	16	1.8	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10410	Pcgf6	-1.34	75	8.49	90	6.35	
10411	Pde6c	-1.34	4	0.14	3	0.1	
10412	Pfn2	-1.34	23	11.71	23	8.76	
10413	Ppard	-1.34	49	2.25	52	1.69	
10414	Ppfia3	-1.34	4	0.15	3	0.11	
10415	Ppfibp2	-1.34	15	0.55	11	0.41	
10416	Ppp4r4	-1.34	5	0.1	4	0.08	
10417	Primpol	-1.34	13	1.66	21	1.24	
10418	Prr5	-1.34	5	0.19	5	0.14	
10419	Ptpn22	-1.34	2	0.13	2	0.1	
10420	Rac2	-1.34	2	0.27	2	0.2	
10421	Rer1	-1.34	174	45.29	172	33.86	
10422	RGD1563072_1	-1.34	0	0.53	0	0.4	
10423	RGD1563145	-1.34	0	0.57	0	0.43	
10424	Rgs14	-1.34	2	0.12	1	0.09	
10425	Rgs17	-1.34	7	0.15	12	0.11	
10426	Rgs8	-1.34	1	0.07	1	0.05	
10427	Rn60_18_0532.1	-1.34	0	0.72	0	0.54	
10428	Rn60_1_0913.2	-1.34	0	1.01	0	0.75	
10429	Rn60_20_0292.1	-1.34	0	1.77	0	1.32	
10430	Rn60_X_0594.3	-1.34	0	1.72	0	1.28	
10431	Rps2_1	-1.34	0	0.32	1	0.24	
10432	RT1-M6-1	-1.34	16	0.45	30	0.34	
10433	Sept12	-1.34	2	0.27	1	0.2	
10434	Sgk494	-1.34	17	1.5	16	1.12	
10435	Shank1	-1.34	3	0.1	4	0.07	
10436	Shisa8	-1.34	4	0.57	4	0.43	
10437	Siglec1	-1.34	1	0.05	1	0.04	
10438	Slc16a7	-1.34	18	1.33	40	0.99	
10439	Slc35e4	-1.34	62	5.67	84	4.24	
10440	Slc35f2	-1.34	3	0.13	2	0.1	
10441	Snap91	-1.34	7	0.43	6	0.32	
10442	Snx20	-1.34	3	0.26	1	0.2	
10443	Sppl3	-1.34	537	53.73	599	40.17	
10444	Susd1	-1.34	44	2.15	39	1.61	
10445	Svop	-1.34	2	0.14	3	0.1	
10446	Syt4	-1.34	1	0.09	1	0.07	
10447	Tex19.1	-1.34	3	0.63	3	0.47	
10448	Tgfbr1_2	-1.34	0	0.28	0	0.21	
10449	Tmprss11d	-1.34	26	0.22	48	0.16	
10450	Tnnt2	-1.34	1	0.3	2	0.22	
10451	Ttc32	-1.34	7	1.48	3	1.11	
10452	Unc93a	-1.34	1	0.26	1	0.2	
10453	Vcam1	-1.34	1	0.09	2	0.07	
10454	Wfdc11	-1.34	1	0.3	1	0.22	
10455	Zfp949	-1.34	25	2.12	29	1.59	
10456	Zmynd10	-1.34	5	1.05	6	0.78	
10457	Zwilch	-1.34	46	6.06	44	4.53	
10458	Nacc1	-1.34	582	48.61	600	36.28	
10459	Ppp2r1a	-1.34	649	104.75	656	78.07	
10460	Map3k5	-1.34	471	21.7	510	16.16	
10461	Slc4a3	-1.34	223	14.93	228	11.1	
10462	Xpo5	-1.35	397	26.38	404	19.61	
10463	Cs	-1.35	514	114.57	537	85.11	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10464	Tbc1d2b	-1.35	183	9.52	199	7.07	
10465	Lrrc41	-1.35	637	71.85	650	53.35	
10466	Sall2	-1.35	138	8.88	139	6.59	
10467	Tenm4	-1.35	1056	34.08	1090	25.29	
10468	Rae1	-1.35	149	29.72	151	22.04	
10469	Cers2	-1.35	387	50.71	377	37.61	
10470	Ccdc97	-1.35	129	15.1	128	11.19	
10471	Sfswap	-1.35	287	12.35	345	9.16	
10472	Rgl2	-1.35	130	14.52	127	10.76	
10473	Cdkn2aipnl	-1.35	237	46.35	243	34.35	
10474	Slc25a39	-1.35	218	55.38	217	41.03	
10475	Cyb5a	-1.35	111	52.14	125	38.62	
10476	Ncoa3	-1.35	136	8.17	152	6.05	
10477	Col16a1	-1.35	346	21.35	343	15.8	
10478	Adipor1	-1.35	447	73.67	454	54.54	
10479	Eif4a3	-1.35	325	73.62	316	54.5	
10480	Clec2d2	-1.35	78	9.22	86	6.82	
10481	Acacb	-1.35	115	3.84	125	2.84	
10482	Slc36a4	-1.35	104	11.72	102	8.67	
10483	Deaf1	-1.35	166	15.88	192	11.75	
10484	Prps2	-1.35	930	110.63	948	81.8	
10485	Zfp516	-1.35	265	15.08	243	11.15	
10486	Pld1	-1.35	464	23.48	473	17.36	
10487	Ptges	-1.35	271	74.2	305	54.83	
10488	F8	-1.35	111	3.69	100	2.73	
10489	Pomgnt1	-1.35	343	44.46	343	32.84	
10490	Zbed3	-1.35	87	16.6	87	12.26	
10491	Acsl4	-1.35	992	60.11	976	44.4	
10492	Plk2	-1.35	85	10.67	85	7.88	
10493	Stom	-1.35	83	11.67	83	8.61	
10494	Sema6a	-1.35	101	9.1	94	6.72	
10495	Dalrd3	-1.35	162	16.48	123	12.16	
10496	Gnas_2	-1.36	864	102.48	753	75.62	
10497	Ndufa4	-1.36	81	35.05	93	25.86	
10498	Parp8	-1.36	126	11.26	143	8.3	
10499	Dcaf13	-1.36	97	18.14	117	13.38	
10500	Mrpl45	-1.36	79	12.32	77	9.08	
10501	Tsnax	-1.36	264	33.74	265	24.89	
10502	Dnajc16	-1.36	84	9.8	81	7.23	
10503	Phf1	-1.36	76	10.78	79	7.94	
10504	Six5	-1.36	70	11.72	69	8.64	
10505	Fbxl20	-1.36	129	15.07	148	11.1	
10506	Sardh	-1.36	99	5.9	119	4.34	
10507	Vnn1	-1.36	291	39.27	294	28.92	
10508	Rpl7a_1	-1.36	0	29.95	0	22.05	
10509	Kat5	-1.36	157	25.45	154	18.73	
10510	Fam96a	-1.36	75	20.01	70	14.73	
10511	Ring1	-1.36	72	13.74	69	10.11	
10512	Ndn	-1.36	187	42.85	185	31.53	
10513	Ube3b	-1.36	353	33.07	354	24.33	
10514	Cops6	-1.36	130	38.58	128	28.38	
10515	Zfp513	-1.36	128	20.86	125	15.34	
10516	Rpl32_1	-1.36	33	250.3	29	184.13	
10517	Fbxo21	-1.36	130	35.82	114	26.34	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10518	Psma7	-1.36	263	94.64	277	69.58	
10519	Pkm_2	-1.36	172	123.95	152	91.1	
10520	Arfrp1	-1.36	66	22.42	67	16.47	
10521	Fpgt	-1.36	66	4.43	99	3.26	
10522	Adipor2	-1.36	183	44.1	180	32.41	
10523	Opa3	-1.36	101	9.95	97	7.31	
10524	Eci1	-1.36	327	100.2	337	73.58	
10525	Tubb5	-1.36	3077	519.09	3028	381.18	
10526	E2f6	-1.36	158	17.83	172	13.09	
10527	Plekhj1	-1.36	48	23.7	42	17.39	
10528	Kdm8	-1.36	66	7.85	75	5.76	
10529	Adgrl1	-1.36	422	23.51	448	17.24	
10530	Sorbs3	-1.36	244	29.42	273	21.58	
10531	P2rx4	-1.36	118	18.93	116	13.88	
10532	Ctdsp1	-1.36	460	49.77	452	36.48	
10533	Cln6	-1.36	63	8.37	74	6.14	
10534	Psma1	-1.36	214	62.3	216	45.65	
10535	Psemb2	-1.37	215	81.1	234	59.41	
10536	Apex1	-1.37	151	42.03	148	30.78	
10537	Reep3	-1.37	404	25.61	394	18.75	
10538	Arvcf	-1.37	54	4.72	51	3.46	
10539	Arid1b	-1.37	645	21.76	720	15.93	
10540	Slc6a6	-1.37	129	12.89	128	9.44	
10541	Ddah2	-1.37	215	61.62	189	45.12	
10542	Gale	-1.37	51	12.43	55	9.1	
10543	Elac2	-1.37	158	17.49	158	12.8	
10544	Tmed10	-1.37	528	142.74	521	104.4	
10545	Hdhd2	-1.37	146	6.78	133	4.96	
10546	Slc25a15	-1.37	46	4.35	48	3.18	
10547	Sema4c	-1.37	195	15.08	197	11.02	
10548	Clec16a	-1.37	159	10.23	199	7.47	
10549	Aifm2	-1.37	106	9.33	108	6.81	
10550	Ino80c	-1.37	53	6.16	54	4.5	
10551	Ndufa6	-1.37	108	61.63	105	45.03	
10552	Rbl1	-1.37	62	5.31	67	3.88	
10553	RGD1306215	-1.37	25	15.5	17	11.32	
10554	U2af114	-1.37	49	13.28	47	9.7	
10555	Zmynd8	-1.37	377	16.61	375	12.13	
10556	Asf1a	-1.37	24	5.59	21	4.08	
10557	Hmbs	-1.37	50	9.27	50	6.77	
10558	Pias2	-1.37	363	41.63	358	30.4	
10559	Tmem128	-1.37	167	42.4	165	30.96	
10560	RGD1311783	-1.37	96	14.35	90	10.48	
10561	Tmem216	-1.37	44	11.61	49	8.47	
10562	Ephb4	-1.37	759	67.31	772	49.12	
10563	Bcar3	-1.37	581	40.58	593	29.61	
10564	Slc39a3	-1.37	95	8.11	86	5.92	
10565	Zdhhc13	-1.37	49	6.16	55	4.49	
10566	Dcaf4	-1.37	68	7.34	58	5.35	
10567	Snrpa	-1.37	90	25.93	86	18.91	
10568	Ppp2r4	-1.37	563	77.7	581	56.66	
10569	Mdm1	-1.37	57	4.05	53	2.95	
10570	AABR07027388.1	-1.37	3	19.39	1	14.13	
10571	Ubac1	-1.37	55	8.03	54	5.86	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10572	Pxdn	-1.37	492	37.7	490	27.47	
10573	Mfsd3	-1.37	14	6.48	11	4.72	
10574	Zfp280c	-1.37	51	4.18	65	3.04	
10575	St3gal3	-1.37	119	11.7	154	8.52	
10576	Ap2a2	-1.37	644	68.91	650	50.19	
10577	5_8S_rRNA_30	-1.37	0	1363.08	0	992.54	
10578	Fam171a2	-1.37	85	11.15	91	8.11	
10579	Igtp	-1.37	68	3.23	59	2.35	
10580	Tm4sf1	-1.37	40	7.06	41	5.14	
10581	Fam57a	-1.37	93	25.69	93	18.69	
10582	Rai1	-1.37	382	12.49	418	9.09	
10583	Rbm45	-1.37	107	14.88	124	10.82	
10584	Dus1l	-1.37	57	5.68	58	4.13	
10585	Dph2	-1.37	37	6.22	38	4.52	
10586	Gja1	-1.38	9096	1040.24	8916	756.5	
10587	Litaf	-1.38	91	11.81	90	8.59	
10588	Usp49	-1.38	164	7.36	172	5.35	
10589	Mpzl1	-1.38	151	17.15	168	12.47	
10590	Fam53b	-1.38	115	4.36	114	3.17	
10591	Mtmr1	-1.38	171	14.84	171	10.78	
10592	Pcnxl4	-1.38	107	7.41	119	5.39	
10593	Acvr1	-1.38	136	12.66	152	9.2	
10594	Elp2	-1.38	269	27.97	305	20.33	
10595	Bak1	-1.38	156	27.23	152	19.79	
10596	Capn10	-1.38	129	16.75	127	12.16	
10597	Tmem14c	-1.38	67	21.72	77	15.77	
10598	LOC690422	-1.38	40	2.24	42	1.63	
10599	Zmiz1	-1.38	1158	45.4	1194	32.97	
10600	Tmem67	-1.38	97	6.17	98	4.48	
10601	Mea1	-1.38	243	77.36	234	56.15	
10602	Col6a3	-1.38	34	1.12	37	0.81	
10603	Wipf3	-1.38	89	5.51	86	4	
10604	Lrrc8d	-1.38	346	39.11	340	28.38	
10605	Hspa5	-1.38	2384	337.05	2316	244.49	
10606	MGC94207	-1.38	47	13.93	42	10.1	
10607	Dexi	-1.38	178	17.38	193	12.6	
10608	Emd	-1.38	107	24.53	100	17.79	
10609	Slc35e1	-1.38	109	29.44	109	21.35	
10610	Cx3cl1	-1.38	34	3.82	35	2.77	
10611	Plxna1	-1.38	734	29.21	707	21.16	
10612	Parp11	-1.38	83	8.91	105	6.46	
10613	Lhfpl2	-1.38	186	13.83	186	10.02	
10614	Crat	-1.38	103	15.86	111	11.49	
10615	Med16	-1.38	71	15.11	57	10.95	
10616	Daglb	-1.38	43	5.54	46	4.01	
10617	Lrrn2	-1.38	42	3.53	50	2.56	
10618	Ttc7a	-1.38	48	2.59	52	1.87	
10619	Mapkapk3	-1.38	239	30.57	245	22.14	
10620	Plekhm2	-1.38	251	19.13	268	13.85	
10621	Sdf4	-1.38	469	101.17	488	73.25	
10622	Prpf40b	-1.38	125	10.98	135	7.95	
10623	Pqlc3	-1.38	141	23.99	155	17.36	
10624	Omd	-1.38	1	11.97	1	8.66	
10625	Setd4	-1.38	126	13.43	168	9.72	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10626	Ostc	-1.38	155	42.7	190	30.9	
10627	Cks1b	-1.38	94	20.98	89	15.18	
10628	Relb	-1.38	45	5.76	56	4.16	
10629	Ypel3	-1.38	38	11.9	43	8.61	
10630	Tmem150a	-1.38	161	38.45	160	27.82	
10631	Abhd2	-1.38	107	16.47	128	11.91	
10632	Nomo1	-1.38	2240	189.01	2185	136.67	
10633	Dip2a	-1.38	289	17.54	286	12.68	
10634	RGD1308134	-1.38	54	21	46	15.18	
10635	Fdx1l	-1.38	40	14.09	39	10.18	
10636	Cyp1b1	-1.38	30	1.98	29	1.43	
10637	Efhd2	-1.38	125	20.62	128	14.9	
10638	Kctd7	-1.38	33	7.35	33	5.31	
10639	Lmbr1	-1.38	42	4.34	56	3.14	
10640	RGD1307262	-1.38	39	14.68	39	10.61	
10641	Stx2	-1.38	83	8.3	99	6	
10642	Mfap2	-1.38	123	41.32	122	29.84	
10643	Rpl31	-1.38	43	102.23	43	73.82	
10644	Per1	-1.38	89	7.87	87	5.68	
10645	Greb1l	-1.39	526	28.99	506	20.93	
10646	Srrt	-1.39	203	43.1	198	31.12	
10647	Acp2	-1.39	216	36.03	208	26.01	
10648	Adi1	-1.39	29	7.48	31	5.4	
10649	Pard6g	-1.39	86	7.43	105	5.36	
10650	Lamtor2	-1.39	66	36.59	66	26.41	
10651	Peo1	-1.39	60	5.83	58	4.21	
10652	Rrnad1	-1.39	61	5.16	62	3.73	
10653	Pip5k1c	-1.39	157	11.98	167	8.64	
10654	Agpat6	-1.39	266	26.33	268	19	
10655	Tceal1	-1.39	55	17.59	57	12.69	
10656	Tle3	-1.39	122	8.66	130	6.24	
10657	Snrpc	-1.39	29	19.25	35	13.89	
10658	Mcm2	-1.39	260	28.42	260	20.5	
10659	Stub1	-1.39	117	47.38	113	34.18	
10660	Csrnp3	-1.39	334	12.14	299	8.76	
10661	AABR07058466.1	-1.39	10	2.99	7	2.16	
10662	RGD1559909	-1.39	29	14.5	28	10.46	
10663	Psph	-1.39	34	8.24	37	5.94	
10664	Tbc1d24	-1.39	75	5.36	60	3.86	
10665	Ccng1	-1.39	474	52.87	456	38.11	
10666	Gpn1	-1.39	134	14.79	167	10.66	
10667	Rnaset2	-1.39	84	33.3	87	23.99	
10668	Trim24	-1.39	250	15.23	304	10.97	
10669	Lrrc58	-1.39	157	35.5	153	25.56	
10670	Pcyt2	-1.39	169	26.01	155	18.73	
10671	Tmem205	-1.39	29	6.77	40	4.88	
10672	Wdr13	-1.39	68	12.92	85	9.3	
10673	Chaf1b	-1.39	36	4.81	31	3.46	
10674	Slc6a9	-1.39	37	2.97	28	2.14	
10675	Ext2	-1.39	773	90.14	770	64.85	
10676	Atpaf2	-1.39	89	13.13	83	9.44	
10677	Rnf167	-1.39	143	25.71	146	18.49	
10678	Camk1	-1.39	95	12.84	89	9.24	
10679	Hspa14	-1.39	105	16.29	120	11.72	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10680	Drap1	-1.39	85	20.09	85	14.44	
10681	RGD1565033	-1.39	26	4.57	25	3.29	
10682	Yipf2	-1.39	60	14.69	55	10.56	
10683	Nup88	-1.39	372	50.14	388	36.02	
10684	Dnttp1	-1.39	172	22.3	165	16.02	
10685	Kbtbd4	-1.39	63	8.24	61	5.92	
10686	Gsdmd	-1.39	153	28.24	151	20.28	
10687	Stx5	-1.39	241	36.04	261	25.88	
10688	Fem1a	-1.39	151	24.91	144	17.88	
10689	Gdf1	-1.39	41	3.41	40	2.45	
10690	Hint2	-1.39	61	30.89	70	22.17	
10691	Xrcc5	-1.39	43	3.53	43	2.53	
10692	Ecd	-1.39	85	12.43	90	8.91	
10693	AC128212.1	-1.39	36	17.92	27	12.85	
10694	Psm2	-1.39	962	117.13	934	83.98	
10695	Use1	-1.39	86	25.61	76	18.36	
10696	Pkm_1	-1.39	410	300.31	374	215.29	
10697	Nacc2	-1.4	271	16.26	264	11.65	
10698	Sec23ip	-1.4	331	24.4	331	17.48	
10699	Tmem70	-1.4	29	4.92	29	3.53	
10700	Mrps36_1	-1.4	46	6.46	46	4.63	
10701	Zcchc3	-1.4	24	7.22	23	5.18	
10702	Tacc1	-1.4	430	16.9	416	12.11	
10703	Pdk2	-1.4	49	13.9	48	9.95	
10704	Tmem11	-1.4	50	11.47	58	8.21	
10705	Camk2g	-1.4	213	9.74	220	6.97	
10706	Agtrap	-1.4	116	12.24	118	8.76	
10707	B4galt1	-1.4	1462	184.59	1527	132.1	
10708	Ptges2	-1.4	72	11.72	71	8.38	
10709	Rap1gap2	-1.4	148	5.55	123	3.97	
10710	Sspl2b	-1.4	177	20.94	178	14.98	
10711	Zfp496	-1.4	221	20.64	217	14.77	
10712	Cacna1h	-1.4	249	10.67	244	7.63	
10713	Mrps12	-1.4	26	11.58	31	8.28	
10714	Mzf1	-1.4	34	2.31	33	1.65	
10715	Tnfrsf1a	-1.4	188	31.19	183	22.3	
10716	Wwp2	-1.4	96	10.03	98	7.17	
10717	Vkorc11i_2	-1.4	1	8.08	0	5.78	
10718	Ap4m1	-1.4	60	11.96	64	8.55	
10719	Tmem252	-1.4	48	7.84	45	5.6	
10720	Vps28	-1.4	153	50.03	145	35.74	
10721	Tbl3	-1.4	114	15.78	109	11.27	
10722	Orc2	-1.4	119	8.07	127	5.76	
10723	Fkbp4	-1.4	486	62.36	475	44.53	
10724	Tmed9	-1.4	336	86.03	322	61.41	
10725	Creb3l2	-1.4	492	46.78	519	33.39	
10726	Map2k2	-1.4	313	56.86	303	40.58	
10727	Cep72	-1.4	34	3.68	35	2.62	
10728	Ehd1	-1.4	177	19.72	172	14.07	
10729	Foxm1	-1.4	74	6.99	68	4.98	
10730	Mrps25	-1.4	37	10.81	34	7.71	
10731	Pex11b	-1.4	51	11.33	66	8.09	
10732	Smim1	-1.4	41	17.58	39	12.55	
10733	N4bp3_2	-1.4	1	4.3	2	3.07	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10734	Nek8	-1.4	30	3.04	39	2.17	
10735	Pcdhgb8	-1.4	22	3.29	21	2.35	
10736	RGD1562618	-1.4	218	8.64	233	6.16	
10737	Zdhhc8	-1.4	163	16.45	160	11.73	
10738	Tmem208	-1.4	50	19.51	50	13.91	
10739	Map7	-1.4	140	5.63	135	4.01	
10740	Ln timer	-1.4	133	6.85	125	4.88	
10741	Fam63a	-1.4	176	30.19	164	21.5	
10742	Ppm1g	-1.4	230	35.37	223	25.19	
10743	AABR07064061.1	-1.4	26	10.6	32	7.55	
10744	Fam217b	-1.4	22	1.65	21	1.17	
10745	Mfsd7b	-1.4	40	4.29	43	3.06	
10746	Tpgs1	-1.4	28	4.93	34	3.51	
10747	Zmym6	-1.4	102	4.95	103	3.53	
10748	Mpv17l2	-1.4	21	4.49	20	3.2	
10749	Soat1	-1.4	413	66.03	394	47.01	
10750	Usp30	-1.41	122	10.46	125	7.44	
10751	Rgs19	-1.41	76	17.4	76	12.38	
10752	Slc6a8	-1.41	264	22.93	249	16.31	
10753	Cdt1	-1.41	65	10.03	60	7.13	
10754	Me1	-1.41	1973	189.28	1918	134.64	
10755	Mfsd11	-1.41	127	12.68	124	9.01	
10756	Bend5	-1.41	32	3.95	38	2.8	
10757	Ccdc53	-1.41	84	21.03	108	14.94	
10758	Csnk1g2	-1.41	322	42.67	331	30.3	
10759	Gylt1b	-1.41	21	3.02	22	2.15	
10760	LOC100910438	-1.41	0	3.96	0	2.81	
10761	Nudt10	-1.41	102	22.52	94	15.99	
10762	Rgs3	-1.41	26	1.3	32	0.92	
10763	Sec61a2	-1.41	182	12.04	206	8.55	
10764	Slc35b1	-1.41	202	43.22	195	30.7	
10765	Spc24	-1.41	27	8.37	26	5.95	
10766	Akap17b	-1.41	60	2.8	63	1.99	
10767	Rft1	-1.41	69	10.1	85	7.17	
10768	Fasn	-1.41	1375	54.55	1317	38.74	
10769	Cdk4	-1.41	381	150.07	363	106.56	
10770	Nfyb	-1.41	82	8.39	88	5.96	
10771	Tmem50a	-1.41	182	54.82	175	38.89	
10772	Glt8d1	-1.41	126	20.69	131	14.68	
10773	Galm	-1.41	92	12.2	110	8.66	
10774	LOC100912380	-1.41	0	77.48	0	54.96	
10775	Wdr91	-1.41	63	5.47	56	3.88	
10776	Alad	-1.41	142	25.59	130	18.12	
10777	Lpar2	-1.41	19	3.35	18	2.37	
10778	Nfkbie	-1.41	19	4.29	22	3.04	
10779	Nudt2	-1.41	27	7.6	23	5.38	
10780	Ppp1r12c	-1.41	279	28.37	260	20.09	
10781	Srd5a1	-1.41	49	5.06	43	3.58	
10782	Tbc1d8	-1.41	48	1.38	59	0.98	
10783	Tmed1	-1.41	193	51.72	183	36.63	
10784	Myo1b	-1.41	633	35.92	630	25.43	
10785	Cog8	-1.41	108	15.84	104	11.22	
10786	Scn4b	-1.41	60	4.75	53	3.36	
10787	Fbxo7	-1.41	154	24.39	155	17.25	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10788	Prpsap2	-1.41	225	32.93	230	23.29	
10789	Ndufaf3	-1.41	38	8.13	38	5.75	
10790	Il17rc	-1.41	51	5.72	59	4.05	
10791	Tmem222	-1.41	81	13.97	81	9.88	
10792	Mybl2	-1.41	68	5.37	76	3.79	
10793	Pak4	-1.41	121	14.47	117	10.23	
10794	Tm9sf4	-1.41	261	31.47	270	22.25	
10795	Thra	-1.41	210	21.65	215	15.3	
10796	Dnajc11	-1.42	225	30.47	225	21.53	
10797	Lzic	-1.42	100	11.67	108	8.25	
10798	Abhd17a	-1.42	167	36.31	170	25.65	
10799	Galnt7	-1.42	414	23.8	423	16.8	
10800	Rad51	-1.42	19	3.01	17	2.12	
10801	Slc35a5	-1.42	94	12.54	89	8.85	
10802	Tmc6	-1.42	28	2.77	30	1.95	
10803	Tmem45al	-1.42	6	4.13	5	2.91	
10804	Bace1	-1.42	238	20.49	270	14.47	
10805	Dennd3	-1.42	24	1.14	23	0.8	
10806	Nprl3	-1.42	204	16.93	244	11.96	
10807	Porcn	-1.42	19	3.48	21	2.46	
10808	Pus7l	-1.42	26	2.35	22	1.66	
10809	Rnf4	-1.42	122	34.78	142	24.56	
10810	Stra13	-1.42	19	32.42	19	22.89	
10811	Ptov1	-1.42	1055	210.68	1021	148.71	
10812	Vps52	-1.42	301	30.64	282	21.62	
10813	Rpl18	-1.42	427	263.43	417	185.91	
10814	Tex15	-1.42	326	10.88	294	7.67	
10815	Pdrg1	-1.42	57	16.1	54	11.35	
10816	Sh3glb2	-1.42	64	10.56	58	7.44	
10817	Zfp94_1	-1.42	224	20.12	210	14.19	
10818	Tkt	-1.42	704	110.52	670	77.94	
10819	Ndufa10	-1.42	216	35.22	255	24.83	
10820	Erc8	-1.42	48	5.03	49	3.54	
10821	Ino80e	-1.42	114	18.61	113	13.12	
10822	Nip7	-1.42	40	10.76	36	7.58	
10823	Hsp90ab1	-1.42	4161	620.59	3835	437.32	
10824	Mettl7a	-1.42	65	10.6	61	7.46	
10825	Aimp2	-1.42	76	14.79	101	10.42	
10826	Wdr59	-1.42	88	4.11	95	2.9	
10827	Tmem201	-1.42	140	8.21	137	5.78	
10828	Cad	-1.42	267	13.94	253	9.81	
10829	AC136013.2	-1.42	28	7.73	32	5.44	
10830	Dnajc15	-1.42	66	12.14	52	8.54	
10831	Irak2	-1.42	33	2.09	26	1.47	
10832	Lmln	-1.42	49	2.81	59	1.98	
10833	LOC501110	-1.42	41	3.06	42	2.15	
10834	Nceh1	-1.42	136	13.04	137	9.18	
10835	Spsb4	-1.42	121	11.09	133	7.81	
10836	AC117925.5	-1.42	2	4.97	3	3.5	
10837	Armc6	-1.42	24	3.27	28	2.3	
10838	Bard1	-1.42	27	1.77	41	1.25	
10839	Echs1	-1.42	0	8.22	0	5.79	
10840	Peli1	-1.42	38	5.17	44	3.63	
10841	Gatad2a	-1.42	477	29.79	465	20.95	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10842	Slc39a14	-1.42	101	6.36	115	4.47	
10843	Txn2	-1.42	189	53.28	187	37.44	
10844	Smarcd1	-1.42	355	38.58	346	27.1	
10845	Fhl3	-1.42	36	7.14	37	5.02	
10846	Gas2l3	-1.42	36	1.83	32	1.29	
10847	Npm3	-1.42	43	22.89	34	16.08	
10848	Paox	-1.42	55	7.49	58	5.26	
10849	Tbc1d10a	-1.42	76	11.69	79	8.2	
10850	Fam214b	-1.42	56	7.78	54	5.46	
10851	Agbl5	-1.43	115	7.17	147	5.03	
10852	Banf1	-1.43	108	53.62	100	37.61	
10853	Eif3d	-1.43	417	76.66	398	53.74	
10854	Hcfc1r1	-1.43	16	19.7	20	13.81	
10855	Bcdin3d	-1.43	39	4.72	52	3.31	
10856	Gpaa1	-1.43	169	28.69	150	20.11	
10857	Ift57	-1.43	45	4.55	42	3.19	
10858	Spred3	-1.43	21	2.47	30	1.73	
10859	Zmat5	-1.43	17	6.1	17	4.28	
10860	Slc38a1	-1.43	41	5.08	66	3.56	
10861	Ttyh1	-1.43	22	1.88	20	1.32	
10862	Rpl15	-1.43	678	179	639	125.4	
10863	Camta2	-1.43	168	11.58	169	8.11	
10864	Tfip11	-1.43	147	14.59	153	10.21	
10865	Ppt1	-1.43	134	30.88	141	21.6	
10866	Cmtr2	-1.43	31	4.38	30	3.06	
10867	Kctd15	-1.43	32	4.22	30	2.95	
10868	Spice1	-1.43	47	3.27	42	2.29	
10869	Spata2L	-1.43	36	3.71	33	2.59	
10870	Gtpbp1	-1.43	160	19.01	152	13.29	
10871	Mrpl37	-1.43	175	23.22	157	16.24	
10872	Tbca_1	-1.43	201	137.21	186	95.93	
10873	Ppox	-1.43	84	15.42	80	10.78	
10874	Pgp	-1.43	93	13.08	85	9.14	
10875	Pop4	-1.43	56	14.14	53	9.88	
10876	Ncoa4	-1.43	755	76.96	705	53.78	
10877	Glb1	-1.43	498	51.01	526	35.65	
10878	Gpc1	-1.43	368	38.04	354	26.58	
10879	Mlh1	-1.43	107	8.11	98	5.67	
10880	C1qbp	-1.43	140	45.68	131	31.9	
10881	Atp5e	-1.43	107	102.34	102	71.46	
10882	Laptm4b	-1.43	634	112.64	613	78.64	
10883	Dusp19	-1.43	16	5.52	18	3.85	
10884	Ly6g6e	-1.43	37	21.01	33	14.66	
10885	Tcirg1	-1.43	31	3.87	38	2.7	
10886	Ttll1	-1.43	26	2.84	36	1.98	
10887	AABR07054189.1	-1.43	4	9.95	3	6.94	
10888	Hspa8	-1.43	0	2.59	0	1.81	
10889	Katnb1	-1.43	52	6.59	47	4.6	
10890	LOC100359539	-1.43	101	17.17	82	11.98	
10891	Psme1	-1.43	154	81.47	117	56.85	
10892	Tmem14a	-1.43	13	5.02	14	3.5	
10893	XAF1	-1.43	34	6.63	47	4.63	
10894	Lepr	-1.43	59	1.26	71	0.88	
10895	Tor3a	-1.43	13	3	11	2.09	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10896	Gpr108	-1.43	147	25.31	135	17.65	
10897	Crtc1	-1.44	161	16.83	183	11.73	
10898	Fam129b	-1.44	50	4.33	44	3.02	
10899	Tmem185b	-1.44	44	15.13	41	10.54	
10900	Tcf3	-1.44	323	34.85	337	24.28	
10901	Tfrc	-1.44	416	30.94	394	21.54	
10902	Dtl	-1.44	37	3.27	32	2.28	
10903	Rars2	-1.44	42	5.35	56	3.73	
10904	AABR07063425.3	-1.44	21	23.03	11	16.03	
10905	Aste1	-1.44	48	2.92	48	2.03	
10906	Nrip1	-1.44	590	22.57	568	15.71	
10907	Sh3pxd2a	-1.44	54	2.85	46	1.99	
10908	Inpp1	-1.44	686	71.38	633	49.67	
10909	Dynlt1	-1.44	107	50.16	106	34.9	
10910	Gstp1	-1.44	609	284.38	566	197.83	
10911	Psmf1	-1.44	135	30.09	131	20.93	
10912	Abca5	-1.44	52	2.91	50	2.03	
10913	Nop9	-1.44	59	9.25	66	6.43	
10914	Vamp2	-1.44	241	37.92	228	26.36	
10915	Ppp1ca	-1.44	606	145.22	567	100.94	
10916	Trim25	-1.44	300	36.01	295	25.03	
10917	Dhdds	-1.44	173	13.15	189	9.14	
10918	Igfbp4	-1.44	646	106.32	609	73.89	
10919	Parp3	-1.44	70	12.29	68	8.54	
10920	Jkamp	-1.44	109	24.64	108	17.12	
10921	Atp5d	-1.44	154	22.59	146	15.68	
10922	Lgals3bp	-1.44	165	25.37	146	17.61	
10923	Lrrc75a	-1.44	58	19.57	62	13.59	
10924	Rrp8	-1.44	30	3.74	26	2.6	
10925	AABR07021996.1	-1.44	14	1.4	14	0.97	
10926	Aars2	-1.44	61	5.29	57	3.67	
10927	Cish	-1.44	17	1.6	16	1.11	
10928	Dxo	-1.44	35	7.44	31	5.16	
10929	Uck2	-1.44	35	6.21	43	4.31	
10930	Usp11	-1.44	377	37.47	344	25.97	
10931	Lmf1	-1.44	156	16.11	153	11.16	
10932	LOC102550456	-1.44	12	13.52	9	9.37	
10933	Pxylp1	-1.44	98	10.5	95	7.27	
10934	Tinagl1	-1.44	42	5.99	39	4.15	
10935	Tmem184c	-1.44	651	87.36	609	60.53	
10936	Rhog	-1.44	119	16.62	114	11.51	
10937	Ctdspl	-1.44	113	8.68	108	6.01	
10938	Mtch1	-1.44	885	161.33	891	111.65	
10939	LOC102723236_1	-1.45	0	80.86	1	55.94	
10940	Urm1	-1.45	82	19.48	85	13.48	
10941	Mcoln1	-1.45	162	23.44	178	16.22	
10942	Ddx26b	-1.45	104	5.45	96	3.77	
10943	Tbccd1	-1.45	48	5.62	45	3.89	
10944	Thbs3	-1.45	86	9.19	86	6.35	
10945	Rhot2	-1.45	152	18.56	141	12.83	
10946	Ccdc120	-1.45	63	4.95	65	3.42	
10947	Sarm1	-1.45	57	4.75	57	3.28	
10948	Grik5	-1.45	194	11.47	208	7.93	
10949	Tns4	-1.45	167	14.32	150	9.9	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
10950	Arl6ip5	-1.45	253	61.22	259	42.28	
10951	LOC100910710	-1.45	56	20.53	55	14.17	
10952	Pla2g4a	-1.45	19	1.39	25	0.96	
10953	Btbd19	-1.45	18	1.55	14	1.07	
10954	Det1	-1.45	48	6.24	46	4.31	
10955	Ovca2	-1.45	8	1.6	7	1.11	
10956	Plk3	-1.45	15	1.97	13	1.36	
10957	Podxl	-1.45	18	0.82	14	0.57	
10958	Rbpms2	-1.45	19	2.11	17	1.45	
10959	Rhbg	-1.45	18	1.87	14	1.29	
10960	Rnf220	-1.45	266	39.76	264	27.44	
10961	Sh3bp1	-1.45	14	1.83	14	1.26	
10962	Tmem192	-1.45	45	6.23	45	4.3	
10963	Zfp772	-1.45	12	2.28	13	1.58	
10964	Gstm5	-1.45	26	9.83	26	6.78	
10965	Snrpf	-1.45	14	5.54	14	3.83	
10966	Clk2	-1.45	304	18.28	287	12.61	
10967	Ndufs3	-1.45	154	43.9	149	30.27	
10968	Tmem176b	-1.45	517	108.21	486	74.63	
10969	Ndufa11	-1.45	105	64.63	99	44.57	
10970	Ppapdc1b	-1.45	111	18.81	101	12.97	
10971	Prr14	-1.45	42	13.98	41	9.63	
10972	Racgap1	-1.45	55	6.28	50	4.32	
10973	RGD1309534	-1.45	60	7.42	63	5.11	
10974	Sgsh	-1.45	52	20.05	48	13.81	
10975	Ubiad1	-1.45	98	9.28	92	6.39	
10976	Tm9sf1	-1.45	188	22.88	171	15.76	
10977	Wfs1	-1.45	64	6.39	64	4.4	
10978	Pcdhgc3	-1.45	334	19.72	340	13.57	
10979	Asmtl	-1.45	29	8.42	27	5.79	
10980	Aip	-1.45	121	18.96	112	13.03	
10981	Aspscr1	-1.45	122	15.61	123	10.73	
10982	Sgta	-1.45	218	25.7	206	17.67	
10983	Snx21	-1.46	67	6.45	76	4.43	
10984	Gtf2h2	-1.46	50	8.78	57	6.04	
10985	Nrep	-1.46	53	30.8	48	21.16	
10986	Wdr77	-1.46	0	4.57	0	3.14	
10987	Armt1	-1.46	48	5.5	43	3.78	
10988	Cxxc5_1	-1.46	287	62.16	247	42.71	
10989	lvd	-1.46	171	25.02	160	17.19	
10990	LOC100360635	-1.46	15	64.41	21	44.25	
10991	Selo	-1.46	182	21.78	170	14.97	
10992	Bin3	-1.46	89	11.47	121	7.87	
10993	Klhl12	-1.46	67	5.46	81	3.75	
10994	Thop1	-1.46	50	7.13	47	4.89	
10995	Ophn1	-1.46	184	8.93	182	6.13	
10996	Uqcrq	-1.46	63	14.78	58	10.15	
10997	Pcdh18	-1.46	67	4.27	56	2.93	
10998	Tmem135	-1.46	186	12.74	176	8.74	
10999	LOC100363012	-1.46	53	89.73	36	61.56	
11000	Ccdc115	-1.46	85	16.43	85	11.27	
11001	Mgat4b	-1.46	825	118.83	768	81.49	
11002	Ppp6r1	-1.46	535	36.77	507	25.21	
11003	Psmg4	-1.46	73	22.63	78	15.51	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11004	Uros	-1.46	18	2.76	19	1.89	
11005	Cactin	-1.46	75	8.09	67	5.54	
11006	Cbx7	-1.46	19	1.36	18	0.93	
11007	Ccdc141	-1.46	17	0.56	20	0.39	
11008	LOC688963	-1.46	48	38.28	50	26.23	
11009	Lrrc20	-1.46	43	2.85	46	1.95	
11010	Lsm7	-1.46	42	26.71	39	18.3	
11011	Map4k1	-1.46	15	1.55	15	1.06	
11012	Marcksl1	-1.46	2	2.87	2	1.97	
11013	MGC116121	-1.46	70	12.17	73	8.34	
11014	Pex11g	-1.46	46	3.77	41	2.58	
11015	Slain1	-1.46	68	12.11	60	8.3	
11016	Smim8	-1.46	20	2.96	22	2.03	
11017	Trim34	-1.46	44	5.08	48	3.48	
11018	Tspy26	-1.46	12	2.1	11	1.44	
11019	Emc8	-1.46	109	32.7	104	22.41	
11020	LOC100911293	-1.46	124	12.32	126	8.44	
11021	Zfr2	-1.46	39	1.62	40	1.11	
11022	Pigx	-1.46	137	44.46	141	30.45	
11023	Pebp1	-1.46	418	137.43	387	94.1	
11024	Atp5o	-1.46	280	114.82	262	78.61	
11025	Cxxc1	-1.46	167	22.9	162	15.67	
11026	Acly	-1.46	1180	89.87	1108	61.5	
11027	RGD1311739	-1.46	71	11.27	84	7.71	
11028	Aen	-1.46	74	10.68	73	7.3	
11029	Coq10a	-1.46	67	9.48	68	6.48	
11030	Lrrc8c	-1.46	390	17.29	374	11.82	
11031	Itpr3	-1.46	63	2.39	64	1.63	
11032	Stat5a	-1.46	54	5.81	50	3.97	
11033	Eif2ak3	-1.46	146	9.35	144	6.39	
11034	Gm2a	-1.46	613	106.81	562	72.97	
11035	Brix1	-1.46	111	14.27	104	9.75	
11036	Tmx2	-1.46	106	23.39	100	15.97	
11037	B3glct	-1.46	89	9.83	78	6.71	
11038	Fzd8	-1.46	0	2.79	0	1.9	
11039	Hmgn3	-1.46	43	5.94	44	4.06	
11040	Map4k2	-1.46	50	4.12	49	2.81	
11041	Slc22a23	-1.46	252	10.01	236	6.83	
11042	Thap3	-1.46	40	6.95	34	4.75	
11043	Tmem243	-1.46	66	7.6	66	5.19	
11044	Tmem38b	-1.47	355	44.85	321	30.6	
11045	Dcakd	-1.47	366	59.13	363	40.35	
11046	Rpl13a	-1.47	291	863.76	285	589.15	
11047	LOC100361694	-1.47	50	46.59	44	31.77	
11048	Rprd1a	-1.47	81	11.12	106	7.58	
11049	Agap1	-1.47	332	11.53	321	7.86	
11050	Plk1	-1.47	49	7.28	49	4.96	
11051	RGD1563349	-1.47	136	13.98	137	9.51	
11052	Disp1	-1.47	233	9.57	228	6.51	
11053	Eif6	-1.47	290	81.27	264	55.28	
11054	Cd48	-1.47	218	42.27	244	28.74	
11055	AABR07072602.1	-1.47	19	5.05	18	3.44	
11056	Cln3	-1.47	60	11.9	57	8.09	
11057	LOC100360056_2	-1.47	0	21.76	0	14.79	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11058	Prr11	-1.47	14	2.09	13	1.42	
11059	Rad51c	-1.47	19	1.69	16	1.15	
11060	Supt7l	-1.47	9	2.08	5	1.41	
11061	AC096370.3	-1.47	0	2.23	0	1.52	
11062	Fastkd2	-1.47	33	4.91	31	3.34	
11063	Hacd4	-1.47	28	7.69	35	5.23	
11064	lsg15	-1.47	11	3.03	14	2.06	
11065	LOC100911224	-1.47	0	2.16	0	1.47	
11066	Lsm5	-1.47	9	7.39	12	5.02	
11067	Map7d2	-1.47	32	1.88	28	1.27	
11068	Mastl	-1.47	146	2.2	178	1.49	
11069	Med9	-1.47	50	6.35	51	4.32	
11070	Phpt1	-1.47	39	18.82	42	12.79	
11071	Prrx1	-1.47	21	4.62	28	3.14	
11072	RGD1562037	-1.47	69	5.31	68	3.61	
11073	Rnf126	-1.47	51	10.49	52	7.13	
11074	Rpl35a_5	-1.47	0	11.96	0	8.13	
11075	Susd6	-1.47	198	15.16	200	10.31	
11076	Timm10b_1	-1.47	1	2.98	1	2.02	
11077	Tmem56	-1.47	13	3.78	13	2.57	
11078	Tp53i13	-1.47	55	11.23	55	7.64	
11079	Trim13	-1.47	17	2.92	13	1.99	
11080	Glrx5	-1.47	84	12.97	80	8.82	
11081	Stx1b	-1.47	24	1.33	27	0.9	
11082	Cox4i1	-1.47	435	195.65	399	132.94	
11083	Greb1	-1.47	4244	176.77	3981	120.02	
11084	Igsf8	-1.47	69	10.82	61	7.34	
11085	Dpy30	-1.47	75	24.84	71	16.85	
11086	Zfp280b	-1.47	272	25.64	256	17.39	
11087	Tmem165	-1.47	133	18.77	130	12.73	
11088	Gria1	-1.47	69	5.23	100	3.55	
11089	Lemd3	-1.47	105	9.98	103	6.77	
11090	Nfkbia	-1.47	135	29.84	119	20.24	
11091	Cox6b1_1	-1.48	76	57.83	67	39.18	
11092	Trappc5	-1.48	35	9.64	38	6.53	
11093	Rab24	-1.48	90	7.08	91	4.8	
11094	Pgk1	-1.48	304	68.22	289	46.21	
11095	Rnf166	-1.48	110	17.54	125	11.88	
11096	Def8	-1.48	84	8.56	70	5.79	
11097	Tmem9	-1.48	292	60.96	298	41.26	
11098	Cables2	-1.48	34	5.28	41	3.57	
11099	Gpc3	-1.48	32	4.11	29	2.78	
11100	LOC499602	-1.48	46	2.32	61	1.57	
11101	Lym4	-1.48	55	7.13	52	4.82	
11102	Relt	-1.48	23	2.74	24	1.86	
11103	Rhbdd2	-1.48	66	11.5	66	7.78	
11104	Rnf7	-1.48	86	18.16	91	12.28	
11105	Slc52a2	-1.48	48	5.13	41	3.47	
11106	Aacs	-1.48	166	16.68	150	11.28	
11107	Fmo5	-1.48	54	6.79	49	4.59	
11108	Zdhhc15	-1.48	35	2.64	44	1.78	
11109	Ccdc61	-1.48	69	5.92	80	4	
11110	Cd320	-1.48	60	14.44	53	9.76	
11111	Fam127b	-1.48	166	48.59	149	32.82	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11112	Dbp	-1.48	41	6.59	44	4.45	
11113	Mocs3	-1.48	31	5.76	28	3.89	
11114	Abca7	-1.48	31	1.65	28	1.11	
11115	Tlr5	-1.48	41	3.49	37	2.35	
11116	Stard3	-1.48	175	21.23	208	14.32	
11117	H2afx	-1.48	91	25.05	78	16.89	
11118	Mb21d2	-1.48	124	10.69	136	7.21	
11119	Plxna3	-1.48	148	7.02	135	4.74	
11120	Crym	-1.48	451	122.09	420	82.29	
11121	Uhrf1bp1	-1.48	189	11.68	185	7.87	
11122	Edf1	-1.48	143	69.24	127	46.63	
11123	AABR07005779.2	-1.49	6	3.58	7	2.41	
11124	Blzf1	-1.49	44	6.31	42	4.24	
11125	Rn60_X_0691.2	-1.49	10	4.44	9	2.99	
11126	Smyd4	-1.49	30	2.11	32	1.42	
11127	Srp14	-1.49	41	30.21	24	20.33	
11128	Sssca1	-1.49	42	13.74	36	9.25	
11129	Suv420h2	-1.49	129	12.01	130	8.08	
11130	Akt1s1	-1.49	124	20.61	126	13.87	
11131	Bcas2	-1.49	48	13.21	60	8.89	
11132	Cdca3	-1.49	34	9.71	33	6.53	
11133	Cpxm1	-1.49	20	3.06	18	2.06	
11134	Gas8	-1.49	23	2.07	28	1.39	
11135	Kif24	-1.49	28	0.81	28	0.55	
11136	Krt10	-1.49	14	1.67	19	1.12	
11137	LOC100912106	-1.49	0	5.63	0	3.79	
11138	Nicn1	-1.49	60	9.75	57	6.56	
11139	Qdpr	-1.49	72	19.06	70	12.82	
11140	RGD1305587	-1.49	9	2.93	8	1.97	
11141	Slc25a35	-1.49	25	4.25	18	2.86	
11142	Slc2a10	-1.49	32	2.64	31	1.78	
11143	Tm6sf1	-1.49	62	3.78	78	2.55	
11144	Fancb	-1.49	15	1.16	12	0.78	
11145	Vstm2b	-1.49	14	1.77	16	1.19	
11146	Mfge8	-1.49	1844	302.88	1668	203.76	
11147	Agpat1	-1.49	98	35.02	61	23.55	
11148	Hsd17b11	-1.49	154	29.3	158	19.7	
11149	Trabd	-1.49	157	17.98	163	12.08	
11150	Ubqln2	-1.49	323	34.8	290	23.38	
11151	Ephx1	-1.49	420	76.29	422	51.27	
11152	Gpx1	-1.49	70	28.62	66	19.22	
11153	Pcyt1a	-1.49	1277	101.04	1164	67.86	
11154	Cog5	-1.49	224	21.87	229	14.68	
11155	Ldlrad3	-1.49	136	8.27	141	5.55	
11156	AABR07034742.1	-1.49	157	52.64	135	35.3	
11157	Unc50	-1.49	134	30.02	145	20.13	
11158	Decr1	-1.49	176	39.4	192	26.41	
11159	Insig2	-1.49	45	10.6	51	7.1	
11160	Vwa8	-1.49	42	7.28	49	4.88	
11161	Elmo1	-1.49	457	43.85	464	29.39	
11162	Adamts2	-1.49	2026	95.79	1932	64.19	
11163	Arse	-1.49	65	9.47	64	6.34	
11164	Polr2j	-1.49	53	23.87	46	15.99	
11165	Abtb1	-1.49	79	12.86	82	8.61	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11166	Lama1	-1.49	965	30.79	892	20.62	
11167	Tpgs2	-1.49	128	42.81	143	28.65	
11168	Vcan	-1.49	1277	37.89	1152	25.35	
11169	Cep135	-1.49	47	2.34	49	1.57	
11170	Abcc10	-1.49	43	1.87	40	1.25	
11171	Csad	-1.49	85	13.05	81	8.73	
11172	Ptger1	-1.49	30	3.58	39	2.39	
11173	Rnaseh2c	-1.49	20	9.44	18	6.31	
11174	Sec11c	-1.49	35	8.47	28	5.67	
11175	Tubb4a	-1.49	20	3.21	19	2.14	
11176	RGD1303003	-1.5	114	29.51	105	19.73	
11177	Ii11ra1	-1.5	71	13.95	65	9.32	
11178	Mrps7	-1.5	44	17.07	46	11.4	
11179	Gpr180	-1.5	174	14.89	165	9.95	
11180	Psmb10	-1.5	77	27.26	69	18.21	
11181	Usp39	-1.5	141	14.37	180	9.59	
11182	Psmb4	-1.5	316	129.03	275	86.14	
11183	Mdh1	-1.5	679	175.11	605	116.89	
11184	Rnd2	-1.5	29	7.53	26	5.02	
11185	Rchy1	-1.5	110	18.19	110	12.14	
11186	Snx29	-1.5	229	9.24	271	6.17	
11187	Bad	-1.5	80	23.51	86	15.68	
11188	Wasf1	-1.5	78	7.52	78	5.02	
11189	Cdk2ap1	-1.5	251	68.52	255	45.7	
11190	Acad9	-1.5	115	13.96	107	9.31	
11191	AABR07009397.1	-1.5	3	17.35	1	11.57	
11192	Lrp11	-1.5	132	12.29	127	8.2	
11193	AC127920.1	-1.5	16	17.73	11	11.82	
11194	2310067B10Rik	-1.5	220	17.5	204	11.66	
11195	H3f3b_1	-1.5	1148	251.81	1023	167.81	
11196	Tubg1	-1.5	181	52.19	153	34.78	
11197	Znrf2	-1.5	297	14.99	289	9.99	
11198	Slc25a12	-1.5	157	18.3	179	12.19	
11199	Gria3	-1.5	468	14.85	447	9.89	
11200	Nr4a1	-1.5	67	7.49	64	4.99	
11201	Sipa1l3	-1.5	258	8.3	240	5.53	
11202	Rpl26	-1.5	182	119.17	91	79.32	
11203	Galt	-1.5	93	22.72	83	15.12	
11204	RGD1562299	-1.5	119	7.74	109	5.15	
11205	Pigs	-1.5	286	41.49	258	27.6	
11206	Gas6	-1.5	2371	242.47	2145	161.21	
11207	Chac2	-1.5	13	2.7	16	1.8	
11208	Ncoa7	-1.5	157	7.82	178	5.2	
11209	Ppan	-1.5	83	15.97	71	10.62	
11210	5_8S_rRNA_23	-1.5	4	21.16	1	14.06	
11211	Abhd14a	-1.5	28	4	21	2.66	
11212	Ddias	-1.5	19	1.96	17	1.3	
11213	Grk5	-1.5	153	8.31	113	5.52	
11214	Hmg1l1_2	-1.5	1	5.08	0	3.37	
11215	Loxl2	-1.5	23	1.45	31	0.96	
11216	Lynx1	-1.5	12	0.86	8	0.57	
11217	Magel2	-1.5	9	0.86	8	0.57	
11218	Nr3c2	-1.5	49	2.48	58	1.65	
11219	Nudt18	-1.5	29	7.05	27	4.69	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11220	Preb	-1.5	33	13.09	14	8.7	
11221	Ptgdr2	-1.5	9	2.04	8	1.35	
11222	RGD1310110	-1.5	58	8.47	49	5.63	
11223	Trib3	-1.5	10	1.68	10	1.12	
11224	Zfp235	-1.5	66	1.38	85	0.92	
11225	Cpt1b	-1.5	11	0.86	9	0.57	
11226	Rpn1	-1.51	1357	219.17	1234	145.54	
11227	Dir2	-1.51	150	16.98	141	11.27	
11228	Sra1	-1.51	108	32.37	103	21.49	
11229	Fam73b	-1.51	185	15.03	173	9.97	
11230	Ube2m	-1.51	340	60.5	299	40.13	
11231	Dtx2	-1.51	89	8.42	98	5.59	
11232	Fbxl12	-1.51	58	10.11	51	6.7	
11233	Osbpl7	-1.51	61	4.53	75	3	
11234	Aprt	-1.51	85	52.68	76	34.9	
11235	Atg101	-1.51	84	17.7	80	11.72	
11236	Mef2bnb	-1.51	48	34.91	61	23.12	
11237	Myom2	-1.51	37	2.81	34	1.86	
11238	Top3b	-1.51	149	16.03	143	10.62	
11239	Myl12b	-1.51	352	106.01	465	70.17	
11240	Adcy9	-1.51	334	18.59	348	12.3	
11241	Slc25a13	-1.51	40	6.48	56	4.29	
11242	Xylt2	-1.51	154	15.85	139	10.48	
11243	Lsg1	-1.51	124	9.46	93	6.25	
11244	Csnk2b	-1.51	214	42.27	191	27.94	
11245	Fv1	-1.51	148	29.9	133	19.75	
11246	Txndc5	-1.51	1235	164.73	1106	108.79	
11247	Syngn2	-1.51	95	35.98	93	23.75	
11248	Ncln	-1.52	336	37.93	309	25.03	
11249	Letm2	-1.52	56	3.58	45	2.36	
11250	Piga	-1.52	25	1.98	33	1.3	
11251	Tmed8	-1.52	44	6.27	49	4.14	
11252	Xkr5	-1.52	27	2.82	22	1.86	
11253	Pgap2	-1.52	57	4.61	46	3.04	
11254	Mmab	-1.52	18	1.94	20	1.28	
11255	Zer1	-1.52	432	32.99	417	21.76	
11256	AABR07033324.1	-1.52	26	53.85	40	35.49	
11257	Fdft1	-1.52	580	55.03	541	36.26	
11258	Gtpbp3	-1.52	46	6	44	3.95	
11259	Thumpd2	-1.52	94	7.6	94	5.01	
11260	Surf4	-1.52	776	69.61	686	45.85	
11261	Cox16	-1.52	40	11.76	38	7.73	
11262	Elp5	-1.52	177	22.93	218	15.09	
11263	LOC100911440	-1.52	0	3.73	0	2.45	
11264	Myeov2	-1.52	56	37.25	54	24.51	
11265	RGD1561777_1	-1.52	22	2.66	18	1.75	
11266	Klhdc3	-1.52	268	43.95	247	28.89	
11267	Fiz1	-1.52	100	11.6	91	7.62	
11268	Prmt2	-1.52	192	30.26	177	19.88	
11269	Zfp707	-1.52	25	7.05	28	4.63	
11270	Dnase2	-1.52	34	8.37	30	5.5	
11271	Tmem248	-1.52	357	63.26	328	41.55	
11272	Rexo1	-1.52	226	15.34	206	10.08	
11273	Atp6v0e2	-1.52	119	48.3	105	31.72	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11274	Abhd4	-1.52	631	94.61	554	62.12	
11275	Cetn2	-1.52	43	11.63	40	7.64	
11276	Urod	-1.52	87	22.16	77	14.54	
11277	Bambi	-1.52	408	93.11	346	61.12	
11278	Mocs2	-1.52	107	22.33	109	14.65	
11279	Hnrnpc	-1.52	45	99.56	36	65.32	
11280	Tubb4b	-1.53	519	117.83	463	77.25	
11281	Agri	-1.53	243	10.42	204	6.82	
11282	Atp1a1	-1.53	1664	163.71	1465	107.13	
11283	Adamts3	-1.53	13	0.69	13	0.45	
11284	Rpp30	-1.53	70	6.04	84	3.95	
11285	6720489N17Rik	-1.53	18	18.39	22	12.03	
11286	Adcy3	-1.53	17	0.51	22	0.33	
11287	B3galt1	-1.53	9	1.08	8	0.71	
11288	Dnhd1	-1.53	35	0.58	38	0.38	
11289	Exosc5	-1.53	19	5.65	14	3.7	
11290	Ftsj2	-1.53	19	3.77	20	2.47	
11291	G6pc3	-1.53	89	21.66	85	14.17	
11292	Hddc3	-1.53	18	3.66	15	2.4	
11293	Hsd17b13	-1.53	22	2.23	19	1.46	
11294	Il18bp	-1.53	18	6.2	21	4.06	
11295	LOC100911515	-1.53	2	39.09	1	25.57	
11296	LOC100911750	-1.53	0	1.46	0	0.96	
11297	MGC116202	-1.53	12	1.46	11	0.96	
11298	Micb	-1.53	72	9.66	78	6.32	
11299	Nusap1	-1.53	37	2.07	32	1.35	
11300	Pask	-1.53	37	1.88	31	1.23	
11301	Pmf1	-1.53	42	9.51	45	6.22	
11302	SNORD36_4	-1.53	0	41.98	0	27.46	
11303	Spep	-1.53	14	0.24	18	0.16	
11304	Tmem141	-1.53	31	11.14	29	7.29	
11305	Tmem42	-1.53	35	6.34	34	4.15	
11306	Ankle1	-1.53	15	1.8	12	1.18	
11307	Cux2	-1.53	17	0.57	26	0.37	
11308	Haus1_1	-1.53	0	3.46	0	2.26	
11309	Kcnd1	-1.53	10	0.78	7	0.51	
11310	Pip5k1b	-1.53	34	1	45	0.66	
11311	Rhpn1	-1.53	9	1.09	7	0.71	
11312	Sfxn2	-1.53	21	2.8	16	1.83	
11313	Zdhhc24	-1.53	26	3.46	24	2.26	
11314	Pik3r2	-1.53	266	27.82	232	18.19	
11315	Isg20l2	-1.53	58	17.55	53	11.46	
11316	Olfml3	-1.53	159	32.54	138	21.25	
11317	Bbs9	-1.53	81	7.68	91	5.01	
11318	RGD1560755	-1.53	55	9.23	48	6.02	
11319	Pla2g6	-1.53	127	9.54	133	6.22	
11320	Hacd3	-1.53	352	45.46	331	29.63	
11321	Kras	-1.53	61	9.98	68	6.5	
11322	Tbc1d25	-1.53	158	5.66	204	3.69	
11323	Isca1	-1.53	202	36.56	186	23.82	
11324	Cluh	-1.54	614	49.46	547	32.22	
11325	Lysmd1	-1.54	31	5.49	29	3.58	
11326	Nfix	-1.54	81	12.85	110	8.37	
11327	Panx1	-1.54	50	3.85	59	2.51	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11328	Zdhhc7	-1.54	146	18.93	128	12.32	
11329	Igsf11	-1.54	979	65.65	970	42.72	
11330	Cplx2	-1.54	110	11.26	105	7.33	
11331	Pla2g16	-1.54	88	34.29	78	22.31	
11332	AABR07063855.1	-1.54	10	4.57	14	2.97	
11333	Ccnb1	-1.54	48	10.37	43	6.74	
11334	Taf1c	-1.54	76	8.12	67	5.28	
11335	Arntl	-1.54	53	4.63	51	3	
11336	Coa3	-1.54	10	26.54	12	17.22	
11337	Lta4h	-1.54	124	19.01	109	12.33	
11338	Ass1	-1.54	211	43.73	199	28.37	
11339	Gps1	-1.54	432	71.36	371	46.29	
11340	Lnx1	-1.54	53	1.76	58	1.14	
11341	LOC100912599	-1.54	0	8.5	0	5.51	
11342	Nid2	-1.54	37	1.19	32	0.77	
11343	Rabepk	-1.54	57	6.91	59	4.47	
11344	Ado	-1.54	15	4.65	13	3.01	
11345	Alkbh4	-1.54	35	5.7	28	3.69	
11346	ENSRNOG00000054	-1.54	43	4.55	76	2.95	
11347	Nfs1	-1.54	22	10.82	20	7.01	
11348	Otud6b	-1.54	65	6.99	72	4.53	
11349	RGD1562409	-1.54	0	6.76	0	4.38	
11350	Slc9a5	-1.54	25	1.31	24	0.85	
11351	Yif1b_1	-1.54	1	18.65	0	12.09	
11352	Stk24	-1.54	371	92.53	335	59.94	
11353	Dfnb31	-1.54	283	17.47	240	11.31	
11354	Clstn1	-1.55	666	51.09	591	33.06	
11355	Mageh1	-1.55	67	19.42	58	12.57	
11356	Skiv2l	-1.55	188	17.21	167	11.14	
11357	Stk35	-1.55	58	5.55	63	3.59	
11358	Lonrf2	-1.55	406	20.32	356	13.14	
11359	Nvl	-1.55	138	8.3	131	5.37	
11360	Pfkm	-1.55	841	95.1	732	61.5	
11361	Ndc80	-1.55	49	3.91	51	2.53	
11362	Sirt7	-1.55	56	7.7	58	4.98	
11363	Acvr1b	-1.55	120	7.7	118	4.98	
11364	Cbx4	-1.55	68	14.77	60	9.55	
11365	Pcmt1	-1.55	96	24.98	98	16.15	
11366	Scyl1	-1.55	219	28.32	197	18.29	
11367	Srsf7	-1.55	358	86.12	338	55.63	
11368	Cdk20	-1.55	57	7.53	44	4.86	
11369	Ckap2	-1.55	29	3.12	22	2.02	
11370	Pcdhga9	-1.55	20	3.29	18	2.12	
11371	Fuca1	-1.55	1301	272.09	1137	175.64	
11372	Rhoc	-1.55	155	30.15	136	19.46	
11373	Polr2c	-1.55	167	45.45	149	29.33	
11374	Fgfr1	-1.55	150	12.06	136	7.78	
11375	Nprl2	-1.55	53	12.02	45	7.75	
11376	Acy1	-1.55	57	11.72	49	7.56	
11377	Ppwd1	-1.55	68	7.53	69	4.86	
11378	Efemp2	-1.55	314	65.37	278	42.16	
11379	Col14a1	-1.55	159	9.28	125	5.98	
11380	Thns12	-1.55	54	5.8	56	3.74	
11381	Nutf2	-1.55	276	50.36	267	32.45	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11382	Ndufs8	-1.55	122	59.54	108	38.36	
11383	Csk	-1.55	176	24.8	166	15.98	
11384	Gltp	-1.55	66	14.27	62	9.19	
11385	Ncbp1	-1.55	148	21.28	128	13.71	
11386	Rnf8	-1.55	59	6.09	82	3.92	
11387	Slc5a6	-1.55	82	8.57	73	5.52	
11388	Ifi30	-1.55	78	20.64	70	13.29	
11389	Nrbp2	-1.55	588	74.54	509	47.97	
11390	Spns1	-1.55	110	13.09	90	8.42	
11391	Scd1	-1.55	588	51.7	519	33.27	
11392	Hmgcl	-1.55	55	10.49	52	6.75	
11393	Oaz1	-1.55	962	487.01	880	313.22	
11394	Nsmf	-1.56	63	6.24	52	4.02	
11395	Rbbp9	-1.56	188	32.35	178	20.79	
11396	Mtm1	-1.56	143	18.88	121	12.13	
11397	Prr3	-1.56	146	16.63	129	10.68	
11398	RGD1311756	-1.56	105	4.25	107	2.73	
11399	Lbr	-1.56	96	15.16	91	9.74	
11400	Ldlr	-1.56	1457	110.19	1262	70.75	
11401	Imp4	-1.56	101	19.1	85	12.26	
11402	Diablo	-1.56	58	27.7	56	17.78	
11403	Slc25a22	-1.56	5	20.2	3	12.96	
11404	Ech1	-1.56	174	52.12	155	33.43	
11405	LOC100360645	-1.56	4446	1935.57	3828	1241.4	
11406	Abhd11	-1.56	17	4.43	16	2.84	
11407	Mrgbp	-1.56	0	8.24	0	5.28	
11408	Pald1	-1.56	101	7.7	84	4.94	
11409	Ppp1r3b	-1.56	7	0.58	7	0.37	
11410	Rab36	-1.56	34	2.03	17	1.3	
11411	Srxn1	-1.56	50	3.46	49	2.22	
11412	Tmem62	-1.56	37	5.25	47	3.36	
11413	Ube2c	-1.56	43	5.25	37	3.36	
11414	AABR07034260.1	-1.56	7	2.81	11	1.8	
11415	Adgrg3	-1.56	29	0.81	19	0.52	
11416	Astn2	-1.56	79	0.56	57	0.36	
11417	B3galt6	-1.56	28	4.74	24	3.04	
11418	Bub1b	-1.56	53	3.73	46	2.39	
11419	Dimt1	-1.56	104	7.53	120	4.83	
11420	Dohh	-1.56	85	16.77	73	10.75	
11421	Gmppa	-1.56	87	15.34	69	9.83	
11422	Jmjd6	-1.56	42	7.46	37	4.78	
11423	LOC100360750	-1.56	0	3.89	0	2.49	
11424	LOC100911274	-1.56	79	18.64	66	11.94	
11425	Mcf2l	-1.56	21	0.41	16	0.26	
11426	Mctp2	-1.56	30	0.29	25	0.19	
11427	Pdlim4	-1.56	120	30.17	103	19.34	
11428	Peli3	-1.56	9	0.43	9	0.27	
11429	Pik3r5	-1.56	9	0.54	11	0.34	
11430	Plid3	-1.56	293	46.89	250	30.05	
11431	Plod1	-1.56	89	10.31	79	6.61	
11432	RGD1308117	-1.56	23	2.61	16	1.67	
11433	RGD1310049	-1.56	20	1.22	15	0.78	
11434	Senp8	-1.56	36	5.16	47	3.31	
11435	Slc22a5	-1.56	215	2.87	327	1.84	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11436	Soga3	-1.56	18	0.89	17	0.57	
11437	Lap3	-1.56	161	24.18	146	15.48	
11438	Tyms	-1.56	101	21.28	86	13.61	
11439	Nsmce4a	-1.56	131	41.87	101	26.78	
11440	Emc3	-1.56	317	56.13	293	35.89	
11441	Yipf6	-1.57	176	14.17	152	9.05	
11442	Rpl28	-1.57	369	118.25	296	75.5	
11443	Tp53	-1.57	429	66.73	398	42.6	
11444	Appbp2	-1.57	936	48.49	801	30.95	
11445	Emc4	-1.57	129	31.3	101	19.97	
11446	Rara	-1.57	191	17.18	158	10.97	
11447	Yif1a	-1.57	89	18.87	75	12.04	
11448	Psmb6	-1.57	14	72.21	7	46.06	
11449	Fam35a	-1.57	54	3.64	67	2.32	
11450	Plxdc1	-1.57	44	4.28	35	2.73	
11451	Eno1	-1.57	330	275.91	335	175.93	
11452	Ormdl3	-1.57	172	108.69	156	69.29	
11453	Gnb2	-1.57	915	197.98	790	126.18	
11454	Cdc25c	-1.57	88	6.67	77	4.25	
11455	Slc25a5	-1.57	277	100.17	241	63.84	
11456	Tdp2	-1.57	79	9.82	92	6.26	
11457	Wdr41	-1.57	62	6.34	69	4.03	
11458	Rsl24d1	-1.57	139	32.48	119	20.68	
11459	Nelfa	-1.57	194	25.68	165	16.35	
11460	Pias3	-1.57	169	18.9	142	12.03	
11461	Clptm1	-1.57	737	102.23	635	65.08	
11462	Alg2	-1.57	148	17.73	126	11.28	
11463	Gata4	-1.57	1370	112.88	1148	71.81	
11464	Dda1	-1.57	106	20.48	91	13.01	
11465	Mgll	-1.57	52	5.36	41	3.4	
11466	Tet1	-1.57	65	2.37	64	1.51	
11467	Cisd3	-1.57	22	7.37	18	4.68	
11468	Pex11a	-1.57	29	3.13	26	1.99	
11469	Unc93b1	-1.57	31	8.41	23	5.34	
11470	Giot1	-1.57	34	7.38	34	4.69	
11471	Copz1	-1.57	510	74.12	435	47.08	
11472	Pfas	-1.57	335	15.78	299	10.02	
11473	Trappc1	-1.58	115	42.6	93	27.04	
11474	Dennd2c	-1.58	47	2.24	42	1.42	
11475	Phyh	-1.58	293	49.2	255	31.18	
11476	Ran	-1.58	534	180.38	438	114.26	
11477	Arsb	-1.58	270	21.33	239	13.51	
11478	Kdelr1	-1.58	511	122.62	439	77.58	
11479	Lrp8	-1.58	598	25.13	507	15.9	
11480	AABR07072266.1	-1.58	0	7.54	0	4.77	
11481	Adgrg6	-1.58	21	0.69	14	0.43	
11482	Enpp2	-1.58	13	1.77	13	1.12	
11483	Hdhd3	-1.58	13	3.99	11	2.52	
11484	Ppap2c	-1.58	33	5.85	32	3.7	
11485	Wdr25	-1.58	49	2.5	82	1.58	
11486	Akap7	-1.58	38	4.44	58	2.81	
11487	Mettl10	-1.58	65	8.78	68	5.56	
11488	Mrpl55	-1.58	35	9.96	34	6.3	
11489	Mtfmt	-1.58	43	6.67	55	4.22	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11490	Mytop	-1.58	20	1.12	22	0.71	
11491	Oplah	-1.58	65	4.39	38	2.78	
11492	Tmem164	-1.58	330	16.22	283	10.25	
11493	Slc9a1	-1.58	221	12.17	204	7.69	
11494	Vbp1	-1.58	135	33.54	131	21.18	
11495	Eif3h_1	-1.58	97	98.14	78	61.97	
11496	Mlf2	-1.58	344	69.57	292	43.93	
11497	Rnf130	-1.58	138	32.33	152	20.41	
11498	Sympk	-1.59	301	23.57	269	14.87	
11499	AABR07035273.1	-1.59	45	2.15	32	1.36	
11500	Uck1	-1.59	169	28.93	165	18.24	
11501	RGD1311946	-1.59	87	14.14	74	8.91	
11502	Thap11	-1.59	70	13.94	59	8.78	
11503	Fst	-1.59	146	41.96	128	26.43	
11504	Bub3	-1.59	216	26.99	193	17	
11505	Engase	-1.59	22	1.72	22	1.08	
11506	Polr3gl	-1.59	36	3.24	42	2.04	
11507	Tdrkh	-1.59	20	2.23	22	1.4	
11508	Trpt1	-1.59	13	2.39	13	1.5	
11509	Gstz1	-1.59	68	10.99	67	6.92	
11510	LOC691135	-1.59	10	1.63	15	1.02	
11511	Ssr4	-1.59	123	59.36	110	37.35	
11512	Mid1ip1	-1.59	169	32.48	141	20.43	
11513	Gaa	-1.59	480	48.68	413	30.61	
11514	Ahi1	-1.59	115	10.14	90	6.38	
11515	Ano1	-1.59	171	10.7	147	6.72	
11516	Ints1_2	-1.59	7	9.84	3	6.18	
11517	Poldip2	-1.59	167	36.15	142	22.72	
11518	Clcn5	-1.59	38	3.07	55	1.93	
11519	Polr1c	-1.59	135	34	116	21.35	
11520	Uap1	-1.59	90	13.04	65	8.18	
11521	Psme2	-1.59	22	52.23	25	32.77	
11522	Sesn2	-1.59	68	6	67	3.76	
11523	Ehd3	-1.59	34	4.32	32	2.71	
11524	Ttll12	-1.6	178	25.07	165	15.71	
11525	Meaf6	-1.6	56	11.4	70	7.14	
11526	Cdk1	-1.6	88	20.53	73	12.85	
11527	Timm50	-1.6	87	24.88	72	15.58	
11528	LOC367746	-1.6	82	43.98	71	27.53	
11529	Sirt6	-1.6	98	18.69	86	11.7	
11530	Samd10	-1.6	51	8.68	43	5.43	
11531	Tssc1	-1.6	75	12.64	71	7.91	
11532	Mrps34	-1.6	67	26.92	56	16.82	
11533	Obsl1	-1.6	663	39.03	558	24.33	
11534	AABR07057683.1	-1.61	4	4.73	4	2.95	
11535	Cyp2j10	-1.61	176	0.56	183	0.35	
11536	Ddr2	-1.61	47	3.48	42	2.17	
11537	Dusp5	-1.61	9	0.9	5	0.56	
11538	Efcc1	-1.61	18	1.29	34	0.8	
11539	Enpep	-1.61	12	0.57	6	0.36	
11540	Kcnq5	-1.61	67	0.67	64	0.42	
11541	Knstrn	-1.61	16	2.8	15	1.75	
11542	LOC100911746	-1.61	1	4.52	0	2.82	
11543	Mtcp1_1	-1.61	6	10.65	5	6.63	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11544	Pomt2	-1.61	114	7.81	107	4.87	
11545	Rnft2	-1.61	17	1.04	18	0.65	
11546	Rps17l	-1.61	2	5.32	2	3.32	
11547	Sox11	-1.61	6	1.08	5	0.67	
11548	Spa17	-1.61	12	3.21	11	2	
11549	AABR07012583.3	-1.61	15	6.14	25	3.82	
11550	Crtap	-1.61	184	40.89	154	25.48	
11551	Dnajc19	-1.61	45	1.84	50	1.15	
11552	Fkbp1b	-1.61	9	1.94	10	1.21	
11553	Frem2	-1.61	10	0.22	6	0.14	
11554	Gmn	-1.61	20	5.53	19	3.45	
11555	Hist1h1c	-1.61	28	17	24	10.59	
11556	Hoga1	-1.61	21	2.45	17	1.53	
11557	Layn	-1.61	11	0.55	5	0.34	
11558	LOC100362027	-1.61	34	113.1	48	70.46	
11559	LOC100909771	-1.61	1	3.41	0	2.13	
11560	LOC103690015	-1.61	0	4.76	0	2.97	
11561	LOC498122	-1.61	27	6.1	23	3.8	
11562	LOC683884	-1.61	70	5.09	83	3.17	
11563	Med27	-1.61	149	19.09	165	11.89	
11564	Mrpl54	-1.61	19	10.67	15	6.65	
11565	Nudt16	-1.61	13	2.75	15	1.72	
11566	Prr7	-1.61	6	2.24	5	1.4	
11567	Scube2	-1.61	10	0.7	13	0.43	
11568	Smpd5	-1.61	5	1.19	4	0.74	
11569	St14	-1.61	7	0.68	6	0.42	
11570	Tmem198	-1.61	19	2.73	16	1.7	
11571	Tmem8b	-1.61	58	9.19	66	5.72	
11572	Traf3ip2	-1.61	22	2.12	32	1.32	
11573	Bckdk	-1.61	222	31.73	176	19.75	
11574	Trmt1	-1.61	188	28.03	158	17.44	
11575	Tmem120a	-1.61	128	23.52	98	14.62	
11576	Btbd2	-1.61	120	22.81	123	14.18	
11577	Gata6	-1.61	530	70.64	494	43.9	
11578	AC096370.2	-1.61	0	8.87	0	5.51	
11579	Mcm3	-1.61	165	19.76	141	12.28	
11580	Ddx56	-1.61	53	12.13	35	7.54	
11581	Ercc1	-1.61	78	24.05	65	14.94	
11582	Pigo	-1.61	68	7.13	57	4.43	
11583	Ldha	-1.61	700	265.67	495	164.95	
11584	AC117925.8	-1.61	0	11.88	0	7.37	
11585	Fzd2	-1.61	139	26.71	117	16.57	
11586	Anp32e	-1.61	391	42.91	350	26.62	
11587	Hunk	-1.61	61	6.92	79	4.29	
11588	Mettl22	-1.61	59	10.87	61	6.74	
11589	Rce1	-1.61	43	10.5	43	6.51	
11590	Spryd4	-1.61	43	10.04	34	6.23	
11591	Tuba1b	-1.61	881	889.41	645	550.98	
11592	Trmu	-1.61	55	7.74	61	4.79	
11593	Mrps24	-1.61	36	14.45	37	8.95	
11594	Neurl4	-1.61	207	13.81	181	8.55	
11595	Zfp521	-1.62	390	11.55	379	7.15	
11596	Atp9a	-1.62	215	31.22	194	19.32	
11597	Neu1	-1.62	121	17.62	97	10.9	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11598	Tmed4	-1.62	110	52.76	51	32.65	
11599	Slc11a2	-1.62	175	11.15	159	6.89	
11600	Mks1	-1.62	57	7.64	51	4.72	
11601	Tor1aip2_1	-1.62	16	11.56	17	7.14	
11602	Esco2	-1.62	17	2.41	19	1.49	
11603	Grid1	-1.62	41	3.02	37	1.87	
11604	Gstm7	-1.62	266	33.44	250	20.66	
11605	Map1lc3a	-1.62	221	81.46	181	50.28	
11606	Atxn7l2	-1.62	50	6.02	38	3.71	
11607	Sept9	-1.62	582	46.19	409	28.49	
11608	Aldoa	-1.62	2382	548.95	2008	338.45	
11609	Zfp52	-1.62	106	7.91	94	4.87	
11610	Sirt2	-1.62	210	28.69	197	17.69	
11611	Pim3	-1.62	247	51.57	206	31.79	
11612	Hexdc	-1.62	121	14.75	122	9.09	
11613	Yeats4	-1.62	89	20.45	73	12.6	
11614	Fgfr2	-1.62	551	32.7	483	20.14	
11615	Rn60_20_0056.5	-1.62	17	11.66	14	7.18	
11616	Tpd52l1	-1.62	79	4.63	90	2.85	
11617	Fzd5	-1.62	16	2.86	14	1.76	
11618	Heatr9	-1.62	20	3.31	15	2.04	
11619	Orc6	-1.62	23	4.07	24	2.51	
11620	Spata2	-1.62	77	10.31	66	6.35	
11621	Adamts7	-1.63	150	8.35	128	5.13	
11622	Wnt4	-1.63	292	16.79	241	10.32	
11623	Bcl7c	-1.63	48	16.52	42	10.16	
11624	LOC102723236_2	-1.63	0	88.1	1	54.14	
11625	Spcs1	-1.63	103	41.75	88	25.65	
11626	Hpcal1	-1.63	182	27.97	189	17.18	
11627	Crif3	-1.63	48	8.43	48	5.18	
11628	Pttg1	-1.63	29	9.71	26	5.96	
11629	Adgrf5	-1.63	123	4.73	100	2.91	
11630	Coq3	-1.63	39	7.77	44	4.77	
11631	Atp6v0c	-1.63	571	172.07	498	105.6	
11632	Rfng	-1.63	53	8.55	39	5.25	
11633	AABR07066529.1	-1.63	38	6.84	33	4.2	
11634	Gde1	-1.63	176	40.78	145	25.02	
11635	Lsm1	-1.63	53	11.61	44	7.12	
11636	Dhodh	-1.63	161	11.59	118	7.11	
11637	Adck3	-1.63	131	15.57	107	9.54	
11638	Rps4x	-1.63	0	76.36	0	46.79	
11639	Rdm1	-1.63	20	2.09	11	1.28	
11640	Dck	-1.63	14	3.41	15	2.08	
11641	Klhl36	-1.63	20	1.54	19	0.94	
11642	Lrfn1	-1.63	25	3.04	27	1.86	
11643	Slc46a3	-1.63	12	1.65	14	1.01	
11644	Abhd10_1	-1.63	0	2.97	0	1.82	
11645	Alg11	-1.63	91	18.42	83	11.27	
11646	Cacna2d2	-1.63	22	0.84	17	0.51	
11647	Haus4	-1.63	11	2.57	11	1.57	
11648	Med11	-1.63	11	4.4	10	2.69	
11649	Mospd1	-1.63	19	6.2	26	3.79	
11650	Nle1	-1.63	40	6.83	33	4.18	
11651	Scd2	-1.64	10466	770.06	8605	470.63	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11652	Wdr11	-1.64	203	14.33	177	8.75	
11653	Ficd	-1.64	111	12.39	90	7.56	
11654	Cdip1	-1.64	309	27.52	314	16.79	
11655	Slc46a1	-1.64	61	7.78	58	4.75	
11656	Get4	-1.64	167	25.45	144	15.53	
11657	P3h1	-1.64	525	70.85	449	43.23	
11658	Dctd	-1.64	53	5.53	52	3.37	
11659	Tm7sf2	-1.64	115	21.5	95	13.1	
11660	LOC103692171	-1.64	1	18.1	0	11.02	
11661	Slc17a9	-1.64	34	4.3	28	2.62	
11662	RGD1561113	-1.64	57	116.38	49	70.9	
11663	Peg3	-1.64	192	9.49	153	5.78	
11664	RGD1306151	-1.64	101	8.43	87	5.13	
11665	Tmem109	-1.64	151	26.82	123	16.33	
11666	Ctnnbip1	-1.64	109	9.98	99	6.07	
11667	Creg1	-1.64	2710	461.14	2248	280.72	
11668	Dpm2	-1.64	46	19.13	38	11.64	
11669	AABR07042821.1	-1.64	23	56.51	17	34.37	
11670	Oas1a	-1.64	100	21.03	75	12.79	
11671	Prkaca	-1.64	377	57.74	314	35.12	
11672	Psmc3	-1.64	410	69.65	350	42.36	
11673	St6galnac6	-1.65	148	20.97	135	12.75	
11674	Apeh	-1.65	217	25.89	174	15.73	
11675	B4galt3	-1.65	193	31.7	161	19.26	
11676	Rnf152	-1.65	40	2.11	31	1.28	
11677	Ppp5c	-1.65	157	23.44	139	14.23	
11678	Fam69b	-1.65	58	8.66	50	5.25	
11679	Slc26a7	-1.65	267	13.42	202	8.14	
11680	Lhpp	-1.65	65	8.17	62	4.95	
11681	Aurka	-1.65	38	5.68	39	3.44	
11682	Mark1	-1.65	1319	71.73	1227	43.46	
11683	Desi2	-1.65	75	9.23	85	5.59	
11684	Armc10	-1.65	154	25.71	156	15.58	
11685	Cnpy3	-1.65	125	24.16	102	14.63	
11686	Ano8	-1.65	155	17.85	148	10.81	
11687	Frmc4a	-1.65	27	3.1	24	1.87	
11688	Fitm2	-1.65	67	5.52	54	3.34	
11689	Parm1	-1.65	71	5.03	67	3.04	
11690	Gpam	-1.65	668	71.35	531	43.13	
11691	Entpd6	-1.65	56	6.81	43	4.12	
11692	LOC102551660	-1.65	99	11.08	94	6.7	
11693	Grc10	-1.65	42	57.24	31	34.59	
11694	Zcchc4	-1.66	48	3.81	58	2.3	
11695	Adarb1	-1.66	73	2.82	53	1.7	
11696	Rab3d	-1.66	83	7.97	71	4.81	
11697	Higd2a	-1.66	74	49.59	50	29.93	
11698	Pddc1	-1.66	22	21.24	30	12.81	
11699	Hmgcs2	-1.66	3312	552.64	2788	333.25	
11700	Ak1	-1.66	113	18.44	81	11.12	
11701	Camkk2	-1.66	62	5.25	78	3.17	
11702	Nhp2l1	-1.66	7	18.64	7	11.24	
11703	AC106663.1	-1.66	0	4.06	0	2.45	
11704	Rabggta	-1.66	105	12.93	88	7.79	
11705	Pycrl	-1.66	70	16.54	58	9.96	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11706	Hba1	-1.66	25	23.44	17	14.12	
11707	Ilvbl	-1.66	167	20.5	141	12.34	
11708	Mpnd	-1.66	159	26.48	137	15.94	
11709	C1qtnf1	-1.66	80	7.53	65	4.53	
11710	Nudt21	-1.66	199	36.02	193	21.68	
11711	Ifitm3	-1.66	116	63.62	97	38.28	
11712	Sgsm3	-1.66	48	5.23	39	3.15	
11713	Ddost	-1.66	537	108.58	429	65.31	
11714	Dhx35	-1.66	66	3.41	68	2.05	
11715	Twf2	-1.66	58	11.67	43	7.02	
11716	Dhrs7b	-1.66	99	15.09	95	9.06	
11717	Nphp1	-1.66	86	6.46	88	3.88	
11718	Cpt1c	-1.67	78	8.09	68	4.86	
11719	Slc35f6	-1.67	144	16.64	118	9.99	
11720	Madd	-1.67	179	9.72	140	5.83	
11721	Lpcat3	-1.67	761	121.39	694	72.83	
11722	Usp21	-1.67	170	25.48	144	15.26	
11723	Nt5c	-1.67	23	9.26	19	5.54	
11724	Zfp112	-1.67	11	1.1	8	0.66	
11725	AABR07031674.3	-1.67	0	5.92	0	3.54	
11726	Adh6	-1.67	8	0.57	7	0.34	
11727	Atg4a	-1.67	16	2.95	18	1.76	
11728	Bid	-1.67	24	2.73	31	1.63	
11729	Chrnbl	-1.67	5	0.8	11	0.48	
11730	Drg2	-1.67	84	21.49	77	12.85	
11731	Duoxa1	-1.67	5	1.09	5	0.65	
11732	Eno3	-1.67	7	1.27	7	0.76	
11733	Ggct	-1.67	10	2.08	12	1.25	
11734	Hes1	-1.67	25	6.27	20	3.75	
11735	Jmjd4	-1.67	15	3.02	16	1.8	
11736	LOC303566	-1.67	5	0.66	4	0.4	
11737	LOC500877	-1.67	280	3.39	279	2.03	
11738	LOC688684	-1.67	0	4.71	0	2.82	
11739	LOC689899	-1.67	0	3.41	0	2.04	
11740	Mcu	-1.67	62	4.65	76	2.78	
11741	Nr4a3	-1.67	6	0.41	6	0.25	
11742	Pars2	-1.67	31	3.3	24	1.98	
11743	Pde12	-1.67	45	3.72	61	2.23	
11744	Pigy	-1.67	24	4.84	22	2.89	
11745	Qpct	-1.67	16	3.56	13	2.13	
11746	RGD1309594	-1.67	24	4.05	21	2.43	
11747	RGD1562758	-1.67	2	3.61	1	2.16	
11748	Rrm2	-1.67	8	3.09	4	1.85	
11749	S1pr3	-1.67	40	3.92	35	2.34	
11750	Scnn1a	-1.67	6	0.54	6	0.32	
11751	SNORD58_1	-1.67	5	27.43	4	16.41	
11752	Tmem38a	-1.67	35	5.02	30	3	
11753	Tmem63a	-1.67	16	1.48	12	0.88	
11754	Ttc30b	-1.67	18	3.52	15	2.11	
11755	Uba7	-1.67	10	0.41	6	0.25	
11756	Usp35	-1.67	23	1.8	32	1.07	
11757	A2m	-1.67	1	0.4	0	0.24	
11758	AABR07037943.1	-1.67	9	0.73	5	0.43	
11759	AABR07043190.1	-1.67	3	1.96	3	1.17	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11760	Ap3m2	-1.67	9	1.45	12	0.87	
11761	AY172581.14	-1.67	5	24.14	4	14.44	
11762	Car12	-1.67	7	0.7	8	0.42	
11763	Car6	-1.67	7	1.32	4	0.79	
11764	Chchd7	-1.67	5	7.02	8	4.2	
11765	Depdc1	-1.67	10	1.1	11	0.66	
11766	Erich1	-1.67	30	5.14	29	3.08	
11767	Fndc8	-1.67	7	0.78	5	0.47	
11768	Hyal1	-1.67	5	1.08	4	0.65	
11769	Intu	-1.67	13	0.64	15	0.38	
11770	L3mbtl4	-1.67	84	1.04	82	0.62	
11771	Lins	-1.67	48	5.45	45	3.26	
11772	Lrrc3	-1.67	5	1.9	4	1.14	
11773	Nudt7	-1.67	97	5.1	83	3.05	
11774	Qtrt1	-1.67	13	1.89	10	1.13	
11775	Scamp5	-1.67	30	3.11	32	1.86	
11776	SNORA44_3	-1.67	0	14.03	0	8.39	
11777	Suox	-1.67	70	11.56	58	6.92	
11778	Tmc7	-1.67	11	0.41	4	0.24	
11779	Sik1	-1.67	623	44.6	518	26.67	
11780	Prss35	-1.67	1524	174.55	1224	104.26	
11781	Rbm42	-1.67	187	36.27	159	21.66	
11782	Gclc	-1.67	187	18.91	165	11.29	
11783	Ttc5	-1.67	193	29.06	174	17.35	
11784	Triobp	-1.68	104	5.54	84	3.3	
11785	Wdr83os	-1.68	87	44.01	72	26.25	
11786	Bcat2	-1.68	179	37.61	161	22.42	
11787	Pnpla6	-1.68	199	13.33	167	7.95	
11788	Best1	-1.68	50	5.95	41	3.55	
11789	Slc37a4	-1.68	87	11.66	78	6.95	
11790	Rfxank	-1.68	42	13.05	45	7.76	
11791	Anapc11	-1.68	108	10.24	115	6.09	
11792	Ift122	-1.68	122	7.67	123	4.56	
11793	Arv1	-1.68	91	11.3	108	6.72	
11794	Gys1	-1.68	187	17.26	159	10.27	
11795	Sdhaf1	-1.68	73	33.61	57	19.99	
11796	Anapc16	-1.68	87	13.64	78	8.11	
11797	Emc6	-1.68	44	12.58	35	7.48	
11798	Sreb1	-1.68	399	31.51	326	18.74	
11799	Tmem50b	-1.68	193	25.75	181	15.3	
11800	Wdr92	-1.68	30	5.98	21	3.55	
11801	Eml1	-1.68	55	5.14	41	3.05	
11802	Ncaph	-1.68	49	4.32	36	2.57	
11803	Sema6d	-1.68	37	1.99	30	1.18	
11804	Stk17b	-1.69	104	10.2	82	6.05	
11805	Pde4b	-1.69	37	3.19	42	1.89	
11806	Socs2	-1.69	244	36.95	227	21.91	
11807	Abcd1	-1.69	65	4.21	59	2.5	
11808	Rps6ka5	-1.69	237	8.4	182	4.98	
11809	Exosc1	-1.69	49	14.78	56	8.75	
11810	Ifnlr1	-1.69	31	2.2	25	1.3	
11811	Mrpl53_2	-1.69	4	14.15	8	8.38	
11812	Wdr12	-1.69	62	12.26	65	7.26	
11813	Polr2e	-1.69	144	46.51	125	27.52	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11814	Rpl27	-1.69	388	346.1	279	204.72	
11815	Lage3	-1.69	66	32.65	57	19.31	
11816	Endod1	-1.69	109	27.79	86	16.43	
11817	Ext1	-1.69	1144	82.65	1090	48.85	
11818	Htra3	-1.69	228	31.76	195	18.75	
11819	RGD1563941	-1.69	19	4.51	15	2.66	
11820	Gstk1	-1.69	41	14.39	32	8.49	
11821	Mettl25	-1.69	48	3.03	67	1.79	
11822	Mgmt	-1.69	80	16.68	83	9.84	
11823	Smpd13b	-1.69	58	8.39	40	4.95	
11824	P3h3	-1.7	309	44.01	263	25.95	
11825	Acot8	-1.7	17	7.39	16	4.36	
11826	Akt2	-1.7	388	61.14	353	36.02	
11827	Phyhipl	-1.7	65	7.37	86	4.34	
11828	Pef1	-1.7	123	24.35	113	14.34	
11829	Mrps17	-1.7	84	22.21	65	13.08	
11830	Glis2	-1.7	129	13.69	113	8.06	
11831	Slc35b2	-1.7	176	34.02	146	20.02	
11832	Irf1	-1.7	152	26.53	123	15.6	
11833	Fam84b	-1.7	89	34.54	70	20.31	
11834	Ccnl1	-1.7	541	43.32	415	25.46	
11835	Ccdc170	-1.7	13	2.39	17	1.4	
11836	Cenpt	-1.7	14	2.24	15	1.32	
11837	Chst10	-1.7	35	3.7	27	2.18	
11838	Dnajc30	-1.7	14	4.75	11	2.79	
11839	Itm2a	-1.7	15	3.14	12	1.85	
11840	Mrps15	-1.7	51	6.91	43	4.06	
11841	Pole2	-1.7	21	2.99	19	1.76	
11842	Qrsl1	-1.7	31	2.48	28	1.46	
11843	RGD1560065	-1.7	46	8.92	38	5.24	
11844	Impdh1	-1.7	271	33.86	216	19.87	
11845	AY172581.2	-1.71	51	271.55	40	159.23	
11846	Suds3	-1.71	282	34.05	264	19.97	
11847	Mrpl15	-1.71	66	8.27	62	4.85	
11848	Rpl18a	-1.71	2706	1504.06	2143	880.77	
11849	Abcc3	-1.71	227	11.13	215	6.51	
11850	Mrp63	-1.71	23	5.05	18	2.95	
11851	Mrps16	-1.71	47	27.44	41	16.05	
11852	Ncald	-1.71	41	2.47	42	1.45	
11853	Phyhip_1	-1.71	0	2.65	1	1.55	
11854	Scrn2	-1.71	25	5.58	28	3.26	
11855	Gbas	-1.71	135	34.73	127	20.32	
11856	Ppcs	-1.71	26	4.83	22	2.82	
11857	Tctn1	-1.71	96	9	70	5.27	
11858	Slc35a1	-1.71	42	9.32	33	5.45	
11859	Chchd4_2	-1.71	24	8.63	19	5.04	
11860	LOC501189	-1.71	75	7.24	74	4.23	
11861	RGD1310852	-1.71	43	2.66	34	1.56	
11862	Abhd13	-1.71	205	13.2	164	7.71	
11863	Plau	-1.71	131	24.72	102	14.44	
11864	Atp13a1	-1.71	352	29.88	288	17.45	
11865	Azin2	-1.71	126	13.07	139	7.63	
11866	Cand2	-1.71	81	5.94	70	3.47	
11867	Abca2	-1.72	647	28.62	504	16.68	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11868	Pip4k2b	-1.72	65	10.77	70	6.28	
11869	Tmem110	-1.72	85	13.3	78	7.75	
11870	Col18a1	-1.72	135	9.18	106	5.35	
11871	Cpsf4	-1.72	63	14.34	78	8.36	
11872	Txn1	-1.72	240	259.77	212	151.24	
11873	Rpl19	-1.72	903	555.21	585	323.06	
11874	Por	-1.72	269	35.49	219	20.65	
11875	Hspb11	-1.72	20	2.62	18	1.53	
11876	Mbd4	-1.72	26	3.83	34	2.23	
11877	Snrpd1	-1.72	52	19.58	41	11.39	
11878	AABR07068327.1	-1.72	14	11.56	11	6.72	
11879	Arl16	-1.72	34	14.2	28	8.26	
11880	B9d1	-1.72	0	4.19	0	2.44	
11881	Csf2ra	-1.72	12	2.34	8	1.36	
11882	Cxcl16	-1.72	9	1.91	9	1.11	
11883	Cxxc4	-1.72	25	1.21	28	0.71	
11884	Dpep2	-1.72	11	2	7	1.16	
11885	Foxo4	-1.72	5	0.98	6	0.57	
11886	LOC498154	-1.72	48	2.26	51	1.31	
11887	Mgat5	-1.72	220	20.59	216	11.97	
11888	Nr0b2	-1.72	11	2.93	9	1.71	
11889	Nrxn3_2	-1.72	5	2.52	7	1.47	
11890	Pgam2	-1.72	23	3.74	26	2.18	
11891	Pnpo	-1.72	21	3.18	18	1.85	
11892	Raver2	-1.72	67	6.64	49	3.86	
11893	RT1-N3	-1.72	9	1.8	10	1.05	
11894	Slc28a2	-1.72	17	0.78	23	0.46	
11895	SNORD29_1	-1.72	9	50.92	6	29.61	
11896	Uvssa	-1.72	16	2.48	19	1.44	
11897	Wdr5b	-1.72	9	1.76	7	1.02	
11898	AABR07072537.1	-1.72	9	1.19	7	0.69	
11899	Lipt1	-1.72	10	1.18	8	0.69	
11900	Mbip	-1.72	30	4.1	25	2.38	
11901	Nxnl2	-1.72	73	14.63	86	8.51	
11902	Stk19	-1.72	20	4.44	20	2.58	
11903	Tasp1	-1.72	23	1.2	28	0.7	
11904	Clcn2	-1.72	0	1.02	0	0.59	
11905	Nt5dc2	-1.72	149	29.82	129	17.32	
11906	Ampd2	-1.72	158	14.02	119	8.15	
11907	Wdr6	-1.72	807	64.76	631	37.58	
11908	Acad10	-1.72	149	10.45	141	6.06	
11909	Nt5c3b	-1.72	185	17.26	136	10.01	
11910	Fshr	-1.72	134	7.5	120	4.35	
11911	Dut	-1.72	112	19	121	11.01	
11912	Fut11	-1.72	55	11.77	50	6.83	
11913	Tor1a	-1.72	104	22.33	83	12.95	
11914	Dcbld1	-1.73	67	9.56	63	5.54	
11915	Slmo2	-1.73	96	49.26	82	28.54	
11916	Pgam1	-1.73	832	181.87	633	105.36	
11917	Pafah2	-1.73	41	4.26	37	2.47	
11918	Sco1	-1.73	32	7.11	30	4.12	
11919	Helz2	-1.73	97	4.01	85	2.32	
11920	Snrnp25	-1.73	57	25.02	44	14.47	
11921	Fndc3b	-1.73	2634	182.59	2229	105.56	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11922	Cyb561d1	-1.73	25	4.58	17	2.65	
11923	AABR07065406.1	-1.73	19	7.39	13	4.27	
11924	Fuca2	-1.73	27	4.82	19	2.79	
11925	Hyal2	-1.73	242	43.9	190	25.36	
11926	Id1	-1.73	109	41.57	87	24.02	
11927	Mark4	-1.73	363	36.17	299	20.9	
11928	Rasgef1b	-1.73	381	44.24	293	25.53	
11929	Mcm5	-1.73	143	16.03	115	9.24	
11930	Sufu	-1.73	82	7.32	85	4.22	
11931	Tmub1	-1.73	37	8.89	27	5.13	
11932	Trerf1	-1.73	270	16.24	227	9.37	
11933	Krtcap2	-1.73	83	23.15	74	13.35	
11934	Atp5g2	-1.74	419	260.78	335	150.2	
11935	Yipf1	-1.74	183	29.86	166	17.19	
11936	Slc25a28	-1.74	254	37.43	184	21.53	
11937	Lgals1	-1.74	277	186.41	223	107.2	
11938	Lrrc16b	-1.74	29	2.11	29	1.22	
11939	Pcbd2	-1.74	26	12.26	21	7.05	
11940	Snx15	-1.74	52	8.56	46	4.92	
11941	Sumf2	-1.74	59	8.43	52	4.85	
11942	Zfp647	-1.74	0	2.93	0	1.69	
11943	Bcl7a	-1.74	42	7.44	30	4.28	
11944	Fabp3	-1.74	107	43.18	87	24.83	
11945	Lmo3	-1.74	22	1.97	17	1.13	
11946	Rap2a	-1.74	71	7.11	63	4.09	
11947	Tcea2	-1.74	37	7.88	28	4.53	
11948	Tm7sf3	-1.74	65	9.2	51	5.29	
11949	Txnl4a	-1.74	39	19.53	39	11.23	
11950	Adprh	-1.74	130	28.8	114	16.55	
11951	Gdf11	-1.74	57	5.05	45	2.9	
11952	Cgnl1	-1.74	461	21.28	352	12.22	
11953	Gtf2ird2	-1.74	168	14.04	157	8.05	
11954	Jagn1	-1.74	126	36.88	100	21.14	
11955	Tmem39a	-1.75	150	21.64	143	12.39	
11956	Rps10_2	-1.75	64	126.14	33	72.18	
11957	AABR07029907.2	-1.75	0	78.91	0	45.12	
11958	Chrm4	-1.75	39	4.47	30	2.56	
11959	Copz2	-1.75	58	20.2	56	11.55	
11960	Hdac6_2	-1.75	0	1.77	0	1.01	
11961	RGD1562114	-1.75	19	9.07	19	5.18	
11962	P4ha2	-1.75	202	22.78	157	13.02	
11963	Trappc2l	-1.75	40	31.03	33	17.74	
11964	Prpsap1	-1.75	291	43.15	266	24.59	
11965	Alkbh8	-1.76	91	5.88	105	3.35	
11966	RGD1302996	-1.76	36	11.18	27	6.37	
11967	Scn2b	-1.76	27	7.33	17	4.18	
11968	Tprn	-1.76	24	2.78	21	1.59	
11969	Fibp	-1.76	194	55.42	145	31.53	
11970	Pcolce	-1.76	611	130.02	468	73.97	
11971	Hagh	-1.76	54	14.07	52	8	
11972	Akr7a2	-1.76	77	17.62	64	10.02	
11973	Sbk1	-1.76	0	10.88	1	6.19	
11974	AABR07067267.1	-1.76	29	10	24	5.68	
11975	Camta1_2	-1.76	23	15.5	19	8.81	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
11976	Med7	-1.76	31	7.72	31	4.39	
11977	Pts	-1.76	34	7.51	22	4.26	
11978	Trappc2	-1.76	33	6.63	43	3.77	
11979	AC107580.1	-1.76	19	19.3	10	10.97	
11980	Tuba1c_2	-1.76	18	49.13	15	27.9	
11981	Rab711	-1.76	196	39.65	150	22.51	
11982	Ecm1	-1.76	199	36	150	20.43	
11983	Cdc6	-1.76	30	3.44	24	1.95	
11984	Gucd1	-1.76	32	24.48	23	13.88	
11985	Pgls	-1.76	63	9.45	52	5.35	
11986	Nudt14	-1.77	44	14.38	30	8.14	
11987	Gusb	-1.77	303	35.26	235	19.97	
11988	Rpl29	-1.77	258	210.92	174	119.45	
11989	Tor2a	-1.77	106	24.98	83	14.14	
11990	Ftl1	-1.77	106	383.71	59	217.24	
11991	Agpat2	-1.77	75	22.9	56	12.96	
11992	Rbm14	-1.77	274	20.01	239	11.32	
11993	Mrpl12	-1.77	86	18.07	69	10.22	
11994	Aurkb	-1.77	43	3.37	37	1.91	
11995	Pgm5	-1.77	64	8.71	60	4.92	
11996	Sox12	-1.77	41	14.55	31	8.23	
11997	Phkg2	-1.77	26	7.39	27	4.18	
11998	Tsply2	-1.77	88	11	72	6.21	
11999	Ccnjl	-1.77	103	3.73	73	2.1	
12000	Gpi	-1.77	1089	180.85	841	102.15	
12001	Fth1	-1.77	1539	2602.97	1104	1469.9	
12002	Rps17	-1.77	37	434.48	18	245.29	
12003	Myocd	-1.77	641	33.86	525	19.09	
12004	Tas1r2	-1.77	106	3.13	100	1.76	
12005	Tmtc4	-1.77	366	44.66	281	25.16	
12006	Tecr	-1.78	705	249.73	537	140.67	
12007	Chpf2	-1.78	259	22.53	194	12.68	
12008	Tapbp	-1.78	208	44.94	157	25.29	
12009	Slc25a23	-1.78	144	20.43	103	11.49	
12010	Tspan9	-1.78	431	32.43	343	18.22	
12011	Eid2	-1.78	4	2.05	3	1.15	
12012	Fam58b	-1.78	24	7.47	18	4.19	
12013	LOC102547118	-1.78	5	0.83	3	0.46	
12014	Ppp1r7	-1.78	101	18.8	82	10.54	
12015	Thsd1	-1.78	11	0.34	7	0.19	
12016	Tmem220	-1.78	6	2.51	4	1.41	
12017	AABR07028970.2	-1.78	7	4.69	12	2.63	
12018	AABR07035802.1	-1.78	5	0.68	4	0.38	
12019	AABR07049064.1	-1.78	7	1.53	12	0.86	
12020	AABR07056156.1	-1.78	9	3.37	7	1.89	
12021	AABR07072761.1	-1.78	1	1.68	2	0.94	
12022	Aard	-1.78	8	2.33	6	1.31	
12023	AC098750.6	-1.78	25	2.27	20	1.27	
12024	Birc5	-1.78	16	3.32	17	1.86	
12025	Bmp6	-1.78	178	22.85	152	12.81	
12026	ENSRNOG00000042	-1.78	5	0.96	4	0.54	
12027	Eya2	-1.78	14	0.51	14	0.29	
12028	Gabbr2	-1.78	39	0.26	17	0.15	
12029	Gdnf	-1.78	9	2.07	11	1.16	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12030	Gen1	-1.78	13	1.01	13	0.57	
12031	Lck	-1.78	5	0.7	4	0.39	
12032	Lgals5	-1.78	2	1.6	1	0.89	
12033	Lhfpl1	-1.78	4	0.68	3	0.38	
12034	LOC100911575	-1.78	0	8.32	0	4.67	
12035	LOC100912338	-1.78	4	3.8	3	2.13	
12036	LOC500077	-1.78	15	2.69	12	1.51	
12037	Lrnf5	-1.78	12	0.48	19	0.27	
12038	Mbp	-1.78	13	0.43	20	0.24	
12039	Morn2	-1.78	5	2.2	3	1.23	
12040	Nrm	-1.78	10	4.44	6	2.49	
12041	Nyap1	-1.78	0	0.64	0	0.36	
12042	Plag1	-1.78	9	0.87	9	0.49	
12043	Pradc1	-1.78	9	2.6	9	1.46	
12044	Prrt3	-1.78	4	0.48	3	0.27	
12045	RGD1310819	-1.78	5	0.35	5	0.19	
12046	RGD1560470	-1.78	4	0.5	3	0.28	
12047	Rn60_10_0699.2	-1.78	4	2.73	3	1.53	
12048	Rn60_4_1360.2	-1.78	0	0.52	0	0.29	
12049	Rpp25	-1.78	44	11.54	33	6.47	
12050	Sap30	-1.78	12	6.58	12	3.69	
12051	Sema5b	-1.78	7	0.44	5	0.25	
12052	Slc8a3	-1.78	80	0.33	84	0.18	
12053	SNORD14_4	-1.78	0	17.24	0	9.67	
12054	Tap1	-1.78	51	4.82	36	2.7	
12055	Tbc1d2	-1.78	36	1.68	31	0.94	
12056	Tigd3	-1.78	4	0.91	3	0.51	
12057	Traf1	-1.78	4	0.76	4	0.42	
12058	Tspan4	-1.78	0	6.16	0	3.46	
12059	Wfikkn2	-1.78	10	0.88	6	0.5	
12060	Zfp626	-1.78	4	1.92	3	1.08	
12061	Zfp773	-1.78	9	2.26	6	1.27	
12062	Zmiz2	-1.78	3	6.3	4	3.53	
12063	AABR07036331.2	-1.78	80	1.49	84	0.83	
12064	AABR07071661.1	-1.78	17	0.46	28	0.26	
12065	Abi2	-1.78	135	20.75	139	11.64	
12066	Adra1d	-1.78	4	0.49	6	0.28	
12067	Art4	-1.78	4	0.59	5	0.33	
12068	Col6a2	-1.78	9	0.78	7	0.44	
12069	Donson	-1.78	27	3.27	30	1.84	
12070	F2rl1	-1.78	9	0.97	6	0.55	
12071	Galnt13	-1.78	46	0.66	36	0.37	
12072	Kcne3	-1.78	11	1.25	25	0.7	
12073	LOC297756	-1.78	0	2.1	1	1.18	
12074	LOC360479	-1.78	11	0.53	7	0.3	
12075	Pon3	-1.78	13	3.99	11	2.24	
12076	Ptrhd1	-1.78	8	3.16	6	1.77	
12077	Rab40b	-1.78	12	0.77	8	0.43	
12078	Tle6	-1.78	4	0.72	5	0.41	
12079	Zfp575	-1.78	4	1.27	3	0.71	
12080	Zfp945	-1.78	16	2.66	12	1.49	
12081	Gna11	-1.79	175	42.64	151	23.86	
12082	Nsf	-1.79	169	12.59	139	7.04	
12083	Prmt1	-1.79	82	154.1	62	86.15	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12084	Tma7	-1.79	18	54.17	21	30.25	
12085	Sgpp1	-1.79	352	39.77	292	22.18	
12086	Rab34	-1.79	249	75.15	186	41.9	
12087	Agpat4	-1.79	471	49.44	449	27.55	
12088	Tmem178b	-1.8	62	1.93	46	1.07	
12089	Klhl26	-1.8	60	4.45	46	2.48	
12090	Ppp4c	-1.8	190	45.13	141	25.11	
12091	Xxyt1	-1.8	66	13.21	58	7.35	
12092	LOC100360087	-1.8	120	252.01	66	140.12	
12093	Hrsp12	-1.8	54	15.88	37	8.83	
12094	Adprm	-1.8	43	9.51	39	5.28	
12095	Ngdn	-1.8	88	21.09	72	11.71	
12096	Pc	-1.8	39	2.82	40	1.57	
12097	Slc24a4	-1.8	57	4.06	66	2.26	
12098	LOC501282	-1.8	86	50.89	70	28.26	
12099	Timm21	-1.8	33	8.55	30	4.74	
12100	L3mbtl2	-1.8	231	22.19	205	12.3	
12101	Slc22a17	-1.8	177	22.77	135	12.63	
12102	Traf3	-1.8	321	12.65	266	7.01	
12103	Mpzl3	-1.81	29	2.73	23	1.51	
12104	Tp53i3	-1.81	29	6.15	28	3.41	
12105	Uba52	-1.81	523	379.31	401	210	
12106	Osgin2	-1.81	68	9.3	59	5.15	
12107	Emilin3	-1.81	24	3.41	18	1.89	
12108	Mettl15	-1.81	52	1.58	45	0.87	
12109	Polr3h	-1.81	84	20.65	64	11.41	
12110	AC115322.4	-1.81	118	292.89	67	161.75	
12111	Prdx2	-1.81	917	368.27	695	203.33	
12112	Ccnf	-1.81	119	11.69	88	6.45	
12113	Asns	-1.81	44	6.83	31	3.77	
12114	Boc	-1.82	84	4.98	81	2.74	
12115	Tesk2	-1.82	33	2.27	30	1.25	
12116	Trpm3	-1.82	82	1.05	90	0.58	
12117	Slc36a1	-1.82	93	8.91	74	4.91	
12118	Lysmd2	-1.82	95	14.5	81	7.98	
12119	RGD1560212	-1.82	21	11.51	12	6.33	
12120	Mum111	-1.82	35	3.02	25	1.66	
12121	Vamp7	-1.82	79	24.89	76	13.69	
12122	Slc27a3	-1.82	77	10.83	61	5.95	
12123	Hint1-ps1	-1.82	125	92.67	103	50.93	
12124	Tmem147	-1.82	62	20.37	42	11.19	
12125	Asrgl1	-1.82	27	3.32	27	1.82	
12126	Eda2r	-1.82	25	2.86	16	1.57	
12127	Fbxo5	-1.82	33	4.58	24	2.51	
12128	Ticam2	-1.82	28	1.64	20	0.9	
12129	AABR07053185.1	-1.82	20	4.73	21	2.59	
12130	Mest	-1.82	18	5.44	18	2.98	
12131	Polq	-1.82	20	0.64	19	0.35	
12132	RGD1561582	-1.82	93	15.82	66	8.67	
12133	Ethe1	-1.82	77	21.15	65	11.6	
12134	Nt5m	-1.82	31	4.13	35	2.26	
12135	Casp9	-1.83	93	8.3	68	4.54	
12136	Hdac6_1	-1.83	13	16.56	8	9.07	
12137	Sf3b5	-1.83	209	106.28	153	58.17	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12138	Pnkd	-1.83	112	9.1	87	4.98	
12139	Sfxn1	-1.83	112	11.7	88	6.4	
12140	Bckdhh	-1.83	53	9.94	41	5.44	
12141	Nop10	-1.83	100	51.9	68	28.39	
12142	Mif	-1.83	117	139.42	85	76.23	
12143	Fam64a	-1.83	24	6.56	19	3.58	
12144	Htr1b	-1.83	26	6.12	19	3.34	
12145	Skp2	-1.83	62	6.35	56	3.47	
12146	Mro	-1.83	132	22.32	122	12.18	
12147	Klhl17	-1.83	48	6.53	37	3.56	
12148	Tmem104	-1.83	67	8.8	77	4.79	
12149	Ldhd	-1.84	424	104.57	300	56.97	
12150	Stoml2	-1.84	78	19.59	59	10.67	
12151	Zmym3	-1.84	754	43.65	547	23.77	
12152	Plbd1	-1.84	410	67.46	287	36.73	
12153	Itm2c	-1.84	1508	281.4	1114	153.17	
12154	Atox1	-1.84	33	14.4	30	7.83	
12155	Havcr1	-1.84	43	4.07	37	2.21	
12156	Ldhd	-1.84	145	4.05	196	2.2	
12157	Magee2	-1.84	11	1.87	8	1.02	
12158	Mertk	-1.84	19	0.86	16	0.47	
12159	Nudt1	-1.84	15	4.62	14	2.51	
12160	RGD1307155	-1.84	27	5.97	23	3.24	
12161	Rnf138	-1.84	49	6.32	55	3.44	
12162	Rpl35a_1	-1.84	0	11.44	0	6.22	
12163	Senp17_2	-1.84	28	11.16	25	6.07	
12164	Tnfrsf10b	-1.84	14	1.91	9	1.04	
12165	Spef1	-1.84	12	2.65	11	1.44	
12166	Rogdi	-1.84	99	22.5	77	12.22	
12167	Tcta	-1.84	55	10.91	44	5.92	
12168	Msh2	-1.84	474	50.39	345	27.32	
12169	Dad1	-1.85	191	70.15	159	38	
12170	AABR07015057.1	-1.85	1059	876.66	567	474.45	
12171	Slc16a1	-1.85	368	51.1	284	27.65	
12172	Efnb1	-1.85	225	24.86	164	13.44	
12173	Angptl4	-1.85	23	3.45	16	1.86	
12174	Fxn	-1.85	36	8.14	42	4.39	
12175	Galnt10	-1.85	209	17.97	178	9.7	
12176	Timp2	-1.85	253	52.53	206	28.36	
12177	Lsr	-1.85	673	104.14	558	56.19	
12178	Slc7a5	-1.85	147	14.66	109	7.91	
12179	Mfsd12	-1.86	94	17.01	74	9.17	
12180	Chpf	-1.86	350	42.7	257	23.01	
12181	Ogdhl	-1.86	150	14.29	111	7.7	
12182	Agk	-1.86	37	4.93	39	2.65	
12183	Serhl2	-1.86	4	3.63	3	1.95	
12184	Glmn	-1.86	61	3.93	74	2.12	
12185	Hist1h4b_6	-1.86	22	6.98	18	3.76	
12186	RGD1307554	-1.86	89	7.34	73	3.95	
12187	Sys1	-1.86	25	9.14	22	4.92	
12188	Osgep	-1.86	33	6.45	27	3.47	
12189	Pih1d1	-1.86	27	7.06	22	3.8	
12190	Rps15	-1.86	417	315.5	288	169.67	
12191	Caskin1	-1.86	75	3.48	50	1.87	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12192	Chst14	-1.86	114	20.06	82	10.79	
12193	March2	-1.86	440	90.52	355	48.65	
12194	Psrc1	-1.86	34	6.33	26	3.4	
12195	Bmyc	-1.86	39	18.58	28	9.97	
12196	Bscl2	-1.86	97	24.9	65	13.37	
12197	Lama4	-1.86	108	4.75	75	2.55	
12198	Nagpa	-1.86	41	6.61	35	3.55	
12199	Nqo1	-1.86	40	8.94	34	4.8	
12200	Qsox2	-1.86	302	22.42	229	12.03	
12201	Clpp	-1.86	51	20.34	41	10.91	
12202	Ndufb8	-1.87	273	136.1	208	72.95	
12203	Baiap2	-1.87	153	11.65	105	6.24	
12204	Tmbim4	-1.87	146	52.85	104	28.31	
12205	Sulf2	-1.87	520	42.79	382	22.9	
12206	Nubp1	-1.87	95	26.49	74	14.18	
12207	Cdkn1a	-1.87	177	30.64	130	16.38	
12208	Cds1	-1.87	13	1.29	7	0.69	
12209	Dhrs3	-1.87	63	8.53	51	4.56	
12210	Gnb1l	-1.87	73	1.6	99	0.85	
12211	LOC687399	-1.87	10	1.7	7	0.91	
12212	Mmp17	-1.87	8	0.72	5	0.39	
12213	Noa1	-1.87	81	9.21	68	4.92	
12214	Pir	-1.87	34	5.03	29	2.69	
12215	RT1-S3	-1.87	5	1.43	4	0.77	
12216	AC107580.4	-1.87	0	1.67	0	0.89	
12217	Arg2	-1.87	17	1.66	27	0.89	
12218	Fam122b	-1.87	1	2.77	0	1.48	
12219	Hap1	-1.87	49	4.92	39	2.63	
12220	Magohb	-1.87	20	6.37	16	3.4	
12221	Mms22l	-1.87	97	5.09	64	2.72	
12222	Pkd1l1	-1.87	11	0.32	10	0.17	
12223	Pnmal2	-1.87	14	1.97	10	1.05	
12224	Scn1a	-1.87	8	0.21	7	0.11	
12225	Tatdn1	-1.87	45	2.87	49	1.53	
12226	Them6	-1.87	30	6.57	21	3.51	
12227	AABR07035074.1	-1.87	10	1.32	4	0.7	
12228	Kdr	-1.87	46	2.4	32	1.28	
12229	Mtg1	-1.87	74	15.07	56	8.05	
12230	Pcdhga3	-1.87	7	1.05	5	0.56	
12231	Rn60_13_0829.4	-1.87	8	2.57	6	1.37	
12232	Dbi	-1.88	142	18.22	93	9.71	
12233	LOC301124	-1.88	146	36.46	106	19.42	
12234	Fat1	-1.88	5218	123.96	3759	66.01	
12235	Ubox5	-1.88	92	6.53	98	3.48	
12236	Wdr24	-1.88	118	15.6	87	8.3	
12237	Cdc34	-1.88	144	46.69	98	24.82	
12238	Mrpl3	-1.88	158	26.6	154	14.13	
12239	Psmc5	-1.88	139	36.83	104	19.55	
12240	Fis1	-1.89	169	34.25	150	18.16	
12241	Cpz	-1.89	86	14.37	62	7.62	
12242	Cacfd1	-1.89	140	10.3	122	5.46	
12243	Id3	-1.89	565	225.3	357	119.2	
12244	Atp2b4	-1.89	602	24.23	453	12.82	
12245	Mthfr	-1.89	140	12.99	106	6.86	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12246	Oaf	-1.89	104	18.18	81	9.59	
12247	Tspan17	-1.89	42	7.46	31	3.94	
12248	Adamts17	-1.89	41	1.83	39	0.97	
12249	Chchd6	-1.89	29	5.71	29	3.01	
12250	Micall2	-1.89	22	1.91	13	1.01	
12251	Smim3	-1.89	74	14.47	63	7.64	
12252	Tstd3	-1.89	17	3.86	14	2.04	
12253	Gorasp2_2	-1.89	0	4.4	0	2.32	
12254	Tgfa	-1.9	179	11.74	143	6.19	
12255	Pced1a	-1.9	69	8.93	54	4.7	
12256	Fam188b	-1.9	90	5.66	82	2.98	
12257	Noc4l	-1.9	75	14.64	53	7.71	
12258	Srm	-1.9	0	28.52	0	15.01	
12259	Ergic3	-1.9	269	67.08	196	35.24	
12260	Mrpl14	-1.91	55	19.25	41	10.11	
12261	Dhps	-1.91	115	27.48	85	14.42	
12262	Lemd2	-1.91	21	14.67	18	7.69	
12263	Klhl11	-1.91	245	35.18	180	18.45	
12264	Phb	-1.91	162	50.18	125	26.31	
12265	Pccb	-1.91	180	28.63	131	15.01	
12266	Lppr2	-1.91	10	1.26	7	0.66	
12267	AABR07008379.1	-1.91	1	8.27	0	4.33	
12268	Gabrg1	-1.91	19	2.08	15	1.09	
12269	Lama2	-1.91	32	0.38	22	0.2	
12270	LOC100910152	-1.91	3	7.5	3	3.92	
12271	LOC100912512	-1.91	12	1.35	12	0.71	
12272	Mrpl42	-1.91	47	21.58	44	11.3	
12273	Piwil4	-1.91	14	1.14	12	0.6	
12274	RGD1561916	-1.91	13	3.11	14	1.63	
12275	Tmem53	-1.91	46	2.53	52	1.32	
12276	AABR07061178.1	-1.91	13	4.7	17	2.46	
12277	Cox7c	-1.91	321	221.52	236	115.93	
12278	Hmgb1	-1.91	67	10.21	68	5.35	
12279	Irak1bp1	-1.91	22	2.94	19	1.54	
12280	Lrfn3	-1.91	22	3.07	15	1.61	
12281	Rnmtl1	-1.91	11	2.46	8	1.29	
12282	Slc14a2_2	-1.91	6	2.01	5	1.05	
12283	Smco4	-1.91	53	20.09	39	10.52	
12284	Snai2	-1.91	10	1.85	7	0.97	
12285	Foxl2	-1.91	112	36.37	78	19.01	
12286	Ubl5	-1.91	91	64.91	64	33.91	
12287	Lsm3	-1.92	48	21.96	29	11.45	
12288	Cdca8	-1.92	45	7.88	28	4.1	
12289	Dusp7	-1.92	35	3.82	24	1.99	
12290	Uqcc2	-1.92	30	23.85	31	12.43	
12291	Slc26a6	-1.92	49	3.31	40	1.72	
12292	Lrig3	-1.92	40	2.19	32	1.14	
12293	Oma1	-1.92	35	4.53	28	2.36	
12294	Pold2	-1.92	24	4.92	17	2.56	
12295	Mrpl49	-1.92	21	16.36	14	8.51	
12296	Dhcr24	-1.93	536	48.06	378	24.93	
12297	Amhr2	-1.93	175	26.19	138	13.57	
12298	Mrpl1	-1.93	1	4.24	0	2.19	
12299	Rilpl2	-1.93	60	14.61	52	7.56	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12300	Sass6_2	-1.93	10	2.18	6	1.13	
12301	Smg9	-1.93	68	6.95	52	3.6	
12302	Spry2	-1.93	55	10.4	36	5.38	
12303	Syng1	-1.93	56	7.84	50	4.06	
12304	Tmem241	-1.93	51	4.08	51	2.11	
12305	Ypel1	-1.93	27	12.76	50	6.6	
12306	Zfp691	-1.93	65	16.13	49	8.35	
12307	Aox1	-1.93	16	1.09	16	0.56	
12308	Tomm6	-1.93	14	20.92	14	10.83	
12309	Fkbp10	-1.93	683	81.09	473	41.96	
12310	Rhbd13	-1.94	80	5.31	63	2.74	
12311	Ecsit	-1.94	70	13.38	62	6.91	
12312	Foxred2	-1.94	57	4.3	42	2.22	
12313	P3h4	-1.94	212	40.43	150	20.88	
12314	Tmem41a	-1.94	46	9.62	40	4.97	
12315	Nckipsd	-1.94	49	4.43	38	2.28	
12316	Nosip	-1.94	96	13.63	88	7.01	
12317	Frmf5	-1.94	290	26.21	218	13.48	
12318	Acbd5	-1.95	8	2.51	5	1.29	
12319	Adcy5	-1.95	90	3.58	92	1.84	
12320	Cox14	-1.95	16	33.29	11	17.11	
12321	Cybrd1	-1.95	53	4.45	40	2.29	
12322	Fam220a	-1.95	53	10.15	38	5.21	
12323	Fam83d	-1.95	17	2.57	14	1.32	
12324	Purg	-1.95	16	3.99	11	2.05	
12325	AC126892.1	-1.95	0	10.19	1	5.23	
12326	RGD1307752	-1.95	147	47.61	125	24.44	
12327	Ssna1	-1.95	70	31.1	50	15.94	
12328	Coa7	-1.95	41	4.56	30	2.34	
12329	Kcne2	-1.95	229	36.9	162	18.92	
12330	AABR07002008.1	-1.95	20	2.72	17	1.39	
12331	LOC100911186	-1.95	0	9.28	0	4.75	
12332	Lxn	-1.95	14	6.42	11	3.28	
12333	Mgst3	-1.95	20	11.47	17	5.86	
12334	Stox2	-1.95	29	1.2	19	0.61	
12335	Nudt22	-1.95	23	6.43	19	3.29	
12336	Pycr2	-1.95	96	21.32	67	10.91	
12337	Chst2	-1.95	38	8.64	26	4.42	
12338	St3gal4	-1.96	2552	351.69	1913	179.85	
12339	Zbtb45	-1.96	82	13.02	58	6.65	
12340	LOC100912604	-1.96	0	30.58	0	15.62	
12341	Ptgr1	-1.96	77	18.51	54	9.45	
12342	Cuta	-1.96	96	38.61	71	19.7	
12343	Abcg1	-1.96	25	2.05	20	1.04	
12344	Tlcd1	-1.96	17	1.9	17	0.97	
12345	LOC100360647	-1.96	70	182.93	48	93.23	
12346	Qpctl	-1.96	112	15.21	88	7.75	
12347	Dlg4	-1.96	85	7.74	67	3.94	
12348	Egfr	-1.96	460	30.83	347	15.69	
12349	Tob1	-1.97	214	38.56	146	19.62	
12350	Acads	-1.97	141	25.61	97	13.02	
12351	Chst12	-1.97	25	5.61	17	2.85	
12352	Reep4	-1.97	108	18.99	74	9.65	
12353	Usb1	-1.97	38	4.23	30	2.15	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12354	Abcb8	-1.97	123	11.87	108	6.03	
12355	Adam8	-1.97	48	3.64	27	1.84	
12356	Fgfr1	-1.97	408	38.89	306	19.73	
12357	Kif2c	-1.97	43	3.87	25	1.96	
12358	Tmem229b	-1.97	33	2.98	38	1.51	
12359	Slc25a42	-1.98	87	8.78	67	4.44	
12360	Chpt1	-1.98	50	8.05	52	4.07	
12361	Igfbp5	-1.98	5094	314.29	3479	158.83	
12362	Rhbdd3	-1.98	51	8.42	39	4.25	
12363	Nxn	-1.99	167	27.15	164	13.67	
12364	Zfp710	-1.99	93	6.97	115	3.51	
12365	LOC690000	-1.99	68	8.7	46	4.37	
12366	Rpl7a_2	-1.99	0	34.48	0	17.3	
12367	Trmt112	-1.99	83	51.9	57	26.03	
							Genes used for Pathway Studio analysis & down- regulated by Ad- FOXO1(A3)
12368	Pofut2	-2	316	48.56	214	24.33	
12369	Atp1b2	-2	350	42.24	236	21.14	
12370	Ninj1	-2	152	47.13	112	23.57	
12371	Gpx4	-2	381	148.45	241	74.15	
12372	Rps16	-2	505	260.83	320	130.22	
12373	Aph1a	-2	342	59.72	231	29.81	
12374	AABR07049682.1	-2.01	4	0.22	1	0.11	
12375	Cdhr1	-2.01	3	0.25	3	0.13	
12376	F11r	-2.01	17	2.28	12	1.14	
12377	LOC100912427	-2.01	0	1.12	0	0.56	
12378	LOC680519	-2.01	4	0.41	4	0.21	
12379	Ppapdc3	-2.01	37	3.87	26	1.93	
12380	Prex1	-2.01	8	0.22	9	0.11	
12381	Ptn	-2.01	43	9.95	30	4.96	
12382	RGD1561919	-2.01	1	2.37	0	1.18	
12383	SNORA71_5	-2.01	3	8.23	2	4.1	
12384	SNORD74	-2.01	6	26.82	4	13.37	
12385	Spata25	-2.01	4	0.69	2	0.34	
12386	Spns2	-2.01	3	0.28	7	0.14	
12387	Stard5	-2.01	24	6.33	22	3.15	
12388	Tmem251	-2.01	2	2.21	0	1.1	
12389	AABR07002885.1	-2.01	0	0.32	0	0.16	
12390	AABR07005633.1	-2.01	3	3.12	2	1.56	
12391	AABR07010460.1	-2.01	3	0.62	3	0.31	
12392	AABR07012795.1	-2.01	2	3.7	1	1.85	
12393	AABR07024907.1	-2.01	0	3.2	0	1.6	
12394	AABR07037203.1	-2.01	2	1.41	2	0.7	
12395	AABR07038019.1	-2.01	0	2.23	0	1.11	
12396	AABR07045217.1	-2.01	5	2.69	5	1.34	
12397	AABR07055280.1	-2.01	1	0.85	0	0.42	
12398	Abcb6	-2.01	49	5.26	34	2.62	
12399	Ablim3	-2.01	8	0.43	3	0.21	
12400	AC095263.1	-2.01	13	2.47	5	1.23	
12401	AC108546.1	-2.01	0	1.49	0	0.74	
12402	AC111781.1	-2.01	3	0.87	2	0.44	
12403	AC131885.1	-2.01	0	3.73	0	1.86	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12404	Acp5	-2.01	16	2.8	8	1.4	
12405	Adcyap1	-2.01	15	1.88	16	0.93	
12406	Adprhl1	-2.01	19	0.37	16	0.18	
12407	Aldh1a3	-2.01	6	0.64	5	0.32	
12408	B3gat2	-2.01	12	0.54	2	0.27	
12409	Bnc1	-2.01	3	0.23	5	0.11	
12410	C4a_1	-2.01	0	0.2	0	0.1	
12411	Ccdc155	-2.01	4	0.59	3	0.29	
12412	Ccrl2	-2.01	18	3.26	12	1.62	
12413	Cenpk	-2.01	6	0.66	8	0.33	
12414	Col23a1_2	-2.01	10	1.99	9	0.99	
12415	Comtd1	-2.01	36	5.18	25	2.58	
12416	Cracr2b_1	-2.01	0	0.68	0	0.34	
12417	Cth	-2.01	2	1.19	1	0.6	
12418	Cyp2r1	-2.01	4	0.64	2	0.32	
12419	Dnph1	-2.01	4	1.41	3	0.7	
12420	Elavl2	-2.01	17	0.79	9	0.39	
12421	Ephb2	-2.01	5	0.22	5	0.11	
12422	Exo1	-2.01	11	1.3	10	0.65	
12423	Fam227b	-2.01	18	0.6	14	0.3	
12424	Fam229b	-2.01	3	1.62	6	0.81	
12425	Fbxl8	-2.01	16	2.22	8	1.1	
12426	Gal	-2.01	3	1.29	2	0.64	
12427	Gda	-2.01	18	0.65	6	0.32	
12428	Gja5	-2.01	10	1.06	6	0.53	
12429	Gla	-2.01	63	17.2	51	8.57	
12430	Gna14	-2.01	6	0.4	9	0.2	
12431	Gria2	-2.01	5	0.16	9	0.08	
12432	Gsta2	-2.01	0	1.35	0	0.67	
12433	Gtpbp6_1	-2.01	0	1.41	0	0.7	
12434	Hao2	-2.01	69	3.94	28	1.97	
12435	Hist1h2bl	-2.01	3	2.85	0	1.42	
12436	Hpx	-2.01	4	0.69	5	0.35	
12437	Hvcn1	-2.01	11	0.92	10	0.46	
12438	Ier5l	-2.01	6	1.38	4	0.69	
12439	Irf7	-2.01	20	2.75	12	1.37	
12440	Kcp	-2.01	4	0.23	3	0.12	
12441	Kif26b	-2.01	88	1.9	70	0.95	
12442	L3mbtl1	-2.01	17	0.43	16	0.21	
12443	Lamc2	-2.01	5	0.21	5	0.1	
12444	Lias	-2.01	47	8.22	37	4.1	
12445	Lin52	-2.01	6	3.69	6	1.84	
12446	Lipe	-2.01	51	2.64	46	1.32	
12447	LOC100362333	-2.01	0	2.48	0	1.24	
12448	LOC100362339	-2.01	0	4.37	0	2.18	
12449	LOC100365839	-2.01	0	1.26	0	0.63	
12450	LOC100912866	-2.01	13	1.65	28	0.82	
12451	LOC102554393	-2.01	13	0.25	20	0.12	
12452	LOC685619	-2.01	12	8.42	11	4.2	
12453	LOC690617	-2.01	86	8.46	75	4.22	
12454	Lrrc46	-2.01	4	0.86	2	0.43	
12455	Mecr	-2.01	33	5.01	25	2.49	
12456	Mgat4a	-2.01	26	0.76	24	0.38	
12457	Mien1	-2.01	45	26.03	31	12.98	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12458	Mmachc	-2.01	19	2.83	15	1.41	
12459	Mok	-2.01	26	1.33	28	0.66	
12460	Msra	-2.01	27	3.12	39	1.55	
12461	Myo15b	-2.01	8	0.1	7	0.05	
12462	Nek2	-2.01	5	2.45	4	1.22	
12463	Nfkbil1	-2.01	6	1.29	3	0.64	
12464	Nlrp14	-2.01	8	0.69	4	0.34	
12465	Nova2	-2.01	19	2.94	11	1.47	
12466	Nptxr	-2.01	14	0.9	9	0.45	
12467	Ntn3	-2.01	4	0.45	2	0.22	
12468	Nudt5	-2.01	69	12.88	56	6.42	
12469	Nxn1	-2.01	3	1.11	2	0.55	
12470	Oas1e	-2.01	0	0.63	0	0.31	
12471	Ogfod2	-2.01	19	3.96	14	1.97	
12472	Ogfrl1	-2.01	6	1.27	5	0.64	
12473	Pcdh8	-2.01	6	0.68	4	0.34	
12474	Pik3ap1	-2.01	7	0.24	12	0.12	
12475	Prkcb	-2.01	131	3.83	84	1.91	
12476	Psmg3	-2.01	55	21.92	36	10.92	
12477	Rab6b	-2.01	10	0.46	7	0.23	
12478	RGD1563620	-2.01	1	0.85	0	0.42	
12479	Rpl38_2	-2.01	0	5.1	0	2.54	
12480	Rpp25l	-2.01	16	7.15	14	3.56	
12481	Rtn4ip1	-2.01	49	4.35	50	2.17	
12482	S100a1	-2.01	6	3.81	4	1.9	
12483	Sfxn5	-2.01	12	0.86	13	0.43	
12484	Sh3pxd2b	-2.01	10	0.79	7	0.39	
12485	Shbg	-2.01	3	0.72	4	0.36	
12486	Slc16a6	-2.01	10	0.86	7	0.43	
12487	Smpd3	-2.01	4	0.22	4	0.11	
12488	SNORA42_12	-2.01	3	8.11	1	4.04	
12489	Sox13	-2.01	15	1.06	14	0.53	
12490	Sparcl1	-2.01	16	1.19	11	0.59	
12491	Tmem132c	-2.01	34	2.02	19	1.01	
12492	Tmem204	-2.01	2	0.61	2	0.31	
12493	Tnfrsf4	-2.01	4	1.07	3	0.53	
12494	Tph1	-2.01	3	0.28	3	0.14	
12495	Trmt61a	-2.01	116	5.33	126	2.66	
12496	Tsx	-2.01	6	1.37	3	0.68	
12497	Upk1b	-2.01	7	0.59	2	0.29	
12498	Wdr62_2	-2.01	0	0.64	0	0.32	
12499	Wdr83	-2.01	36	8.29	31	4.13	
12500	Xkr6	-2.01	55	0.78	74	0.39	
12501	Zfp383_2	-2.01	0	0.42	0	0.21	
12502	Zfp438	-2.01	14	0.62	14	0.31	
12503	Zfp667	-2.01	14	0.96	9	0.48	
12504	Zfp879	-2.01	10	1.38	9	0.69	
12505	Zfp94_2	-2.01	9	1.45	6	0.72	
12506	Akr1b1-ps2	-2.01	2	1.15	2	0.57	
12507	Clybl	-2.01	49	4.38	49	2.18	
12508	LOC100910318_2	-2.01	0	2.57	0	1.28	
12509	Pdzd7	-2.01	14	0.56	14	0.28	
12510	RGD1560789	-2.01	0	1.34	0	0.67	
12511	Naga	-2.01	207	34.21	141	17.01	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12512	RGD1359127	-2.02	101	22.64	68	11.23	
12513	Rap2b	-2.02	70	46.57	45	23.05	
12514	Ndufs7	-2.02	80	22.88	72	11.31	
12515	Parl	-2.02	55	16.18	37	8	
12516	Pcdh10	-2.02	177	18.82	131	9.3	
12517	LOC686442	-2.03	172	115.46	110	57.02	
12518	Phactr1	-2.03	113	13.64	89	6.72	
12519	Gramd1b	-2.03	311	21.99	225	10.84	
12520	Snrpn	-2.03	5	9.53	2	4.69	
12521	Sobp	-2.04	98	4.88	115	2.4	
12522	Lsm10	-2.04	40	12.79	26	6.27	
12523	Pex16	-2.04	36	7.47	25	3.66	
12524	Mri1	-2.05	29	5.03	30	2.46	
12525	Ogg1	-2.05	33	6.21	23	3.04	
12526	Pgap3	-2.05	30	3.9	21	1.91	
12527	Rab3a	-2.05	18	6.84	14	3.34	
12528	Wdr73	-2.05	31	6.22	21	3.04	
12529	ldh3g	-2.05	213	54.38	151	26.57	
12530	Cerk	-2.05	180	14.25	119	6.96	
12531	Nr5a1	-2.05	863	124.12	626	60.54	
12532	Nbeal2	-2.05	50	1.92	32	0.93	
12533	Csdc2	-2.05	379	46.38	275	22.6	
12534	Smoc2	-2.05	106	10.33	73	5.03	
12535	Bcam	-2.06	237	34.61	154	16.84	
12536	Emp3	-2.06	966	454.95	651	221.31	
12537	Zfp617	-2.06	20	4.88	15	2.37	
12538	Cfp	-2.06	53	4.9	35	2.38	
12539	Kitlg	-2.06	25	1.35	16	0.66	
12540	Gsr	-2.06	239	35.31	197	17.15	
12541	Tmem189	-2.06	275	53.2	205	25.81	
12542	l7Rn6	-2.06	48	8.63	56	4.18	
12543	Bst2	-2.06	451	190.77	293	92.49	
12544	LOC102553763	-2.07	104	18.09	68	8.76	
12545	Gins4	-2.07	26	5.83	25	2.82	
12546	Rbmxl1b	-2.07	43	15.1	25	7.3	
12547	Tmem17	-2.07	36	5.5	22	2.66	
12548	LOC100910577	-2.07	12	3.54	10	1.71	
12549	Rnf150	-2.07	72	4.34	76	2.1	
12550	Fkbp5	-2.07	726	71.94	480	34.77	
12551	Mrap	-2.07	107	35.51	95	17.16	
12552	Mrpl22	-2.07	82	28.22	72	13.63	
12553	Churc1	-2.07	90	36.9	102	17.82	
12554	Got1	-2.07	136	19.93	93	9.62	
12555	F8a1	-2.07	31	7.41	20	3.57	
12556	Polr2f	-2.08	45	25.99	29	12.52	
12557	Pqlc1	-2.08	420	69.96	310	33.71	
12558	Ppp2r3b	-2.08	70	9.37	51	4.51	
12559	Nr2f2	-2.08	183	22.22	133	10.69	
12560	Herpud1	-2.08	392	76.07	256	36.59	
12561	Cyb5d1	-2.08	17	7.38	12	3.55	
12562	Irs3	-2.08	14	2.57	11	1.24	
12563	LOC679739	-2.08	0	7.93	0	3.81	
12564	Tmem261	-2.08	42	17.44	27	8.38	
12565	Pyroxd2	-2.08	122	12.32	96	5.91	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12566	Rplp0	-2.08	2312	817.22	1492	392.04	
12567	Cbfa2t3	-2.09	147	12.8	93	6.13	
12568	Nlr1	-2.09	33	3.1	21	1.49	
12569	Psmb9	-2.09	25	9.87	16	4.72	
12570	Tspan15	-2.09	37	10.3	35	4.93	
12571	Uqcr10_1	-2.09	121	107.74	77	51.5	
12572	Dolpp1	-2.09	40	5.62	26	2.69	
12573	Mvd	-2.1	99	20.06	64	9.57	
12574	Abcc4	-2.1	141	8.48	89	4.05	
12575	Gapdh	-2.1	38	281.49	21	134.27	
12576	Anks6	-2.1	79	3.35	77	1.6	
12577	Areg	-2.1	13	3.49	8	1.66	
12578	Matn2	-2.1	158	4.57	192	2.17	
12579	Yme1l1	-2.1	0	1.85	0	0.88	
12580	Zcchc10	-2.1	20	4.12	22	1.96	
12581	Ankrd9	-2.1	11	2.74	7	1.3	
12582	Bphl	-2.1	45	6.74	46	3.21	
12583	Dnah1	-2.1	14	0.29	11	0.14	
12584	Efhc1	-2.1	20	1.8	15	0.86	
12585	Wars2	-2.1	37	4.03	34	1.92	
12586	Asna1	-2.1	203	49.42	146	23.49	
12587	Cdh24	-2.11	55	6.33	30	3	
12588	Isoc2b	-2.11	81	14.22	67	6.74	
12589	Mgst2	-2.11	102	66.95	82	31.72	
12590	LOC100910370	-2.11	0	14.03	0	6.64	
12591	Tsen34_2	-2.11	0	8.08	1	3.83	
12592	LOC100912481	-2.11	11	67.47	2	31.94	
12593	Fndc4	-2.12	19	4.84	12	2.29	
12594	Ammecr1	-2.12	70	13.69	66	6.46	
12595	Gnb5	-2.12	31	6.51	25	3.08	
12596	Etnk2	-2.12	388	53.06	256	25.04	
12597	Star	-2.12	310	90.05	195	42.46	
12598	Slc44a2	-2.12	255	24.86	169	11.7	
12599	Tmem180	-2.12	40	4.43	33	2.09	
12600	Mib2	-2.13	159	12.58	111	5.91	
12601	Pex10	-2.13	36	7.46	26	3.51	
12602	Ccne1	-2.14	26	4.45	19	2.08	
12603	Cenph	-2.14	24	4.61	17	2.15	
12604	LOC102551435	-2.14	12	2.52	13	1.18	
12605	Ccdc28b	-2.14	21	4.71	14	2.2	
12606	Efr3b	-2.14	10	0.74	9	0.35	
12607	Fmc1	-2.14	18	4.34	12	2.03	
12608	Pomgnt2	-2.14	64	10.91	40	5.1	
12609	Sod3	-2.14	16	3.35	10	1.57	
12610	Syn2	-2.14	28	1.1	25	0.51	
12611	Rab4b	-2.14	208	57.59	150	26.85	
12612	Wdr90	-2.15	125	6.76	84	3.15	
12613	Prkar2b	-2.15	2893	262.47	1823	122.09	
12614	Dhcr7	-2.15	782	95.49	503	44.41	
12615	Adgrg1	-2.15	6393	585.93	4050	272.13	
12616	Tysnd1	-2.15	36	4.54	23	2.11	
12617	Tubb3	-2.16	457	90.52	301	41.94	
12618	Rps29_2	-2.16	100	349.01	58	161.53	
12619	Cbln1	-2.16	88	12.44	52	5.76	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12620	LOC103690024	-2.17	3	22.51	0	10.4	
12621	Mpv17	-2.17	72	24.28	100	11.21	
12622	Tulp3	-2.17	363	83.3	247	38.43	
12623	Ddt	-2.17	176	99.45	113	45.86	
12624	Pex6	-2.17	95	6.64	63	3.06	
12625	Abcc9	-2.17	31	1.31	23	0.6	
12626	Ankrd13d	-2.17	20	1.93	16	0.89	
12627	LOC100911918	-2.17	15	2.69	23	1.24	
12628	Polg2	-2.17	18	2.51	20	1.16	
12629	Trip13	-2.17	41	3.49	23	1.61	
12630	Trib2	-2.18	914	107.08	602	49.23	
12631	Tmtc2	-2.18	670	41.14	421	18.89	
12632	Fntb	-2.18	132	14.14	103	6.49	
12633	Id2	-2.18	633	112.51	484	51.59	
12634	Jag2	-2.18	34	2.48	21	1.14	
12635	Igdcc4	-2.19	320	25.33	196	11.58	
12636	Cdc25b	-2.19	21	2.33	13	1.07	
12637	LOC100158225	-2.19	20	2.98	16	1.36	
12638	Amigo2	-2.19	18	2.11	11	0.96	
12639	Cox6a1	-2.19	167	237.42	55	108.47	
12640	Proser2	-2.19	24	1.42	17	0.65	
12641	Slc26a11	-2.19	56	7.33	34	3.35	
12642	Zfand4	-2.19	38	2.45	37	1.12	
12643	Slc2a1	-2.19	181	23.33	112	10.65	
12644	Fam20b	-2.19	55	9.39	42	4.29	
12645	Slc39a11	-2.19	130	6.67	129	3.04	
12646	Tspo	-2.19	135	55.24	86	25.17	
12647	Melk	-2.2	38	3.57	24	1.62	
12648	RGD1304567	-2.21	49	12.49	30	5.65	
12649	Abhd8	-2.21	179	30.28	108	13.69	
12650	Tmem8a	-2.21	48	3.48	32	1.57	
12651	Slc25a1	-2.21	520	108.73	315	49.09	
12652	Ybx1-ps3	-2.22	12	22.46	9	10.11	
12653	Fzr1	-2.22	117	20.8	70	9.36	
12654	Atp1b1	-2.22	360	45.67	219	20.53	
12655	Grem2	-2.23	767	65.62	493	29.48	
12656	AABR07002969.1	-2.23	21	11.04	20	4.95	
12657	Dph6	-2.23	23	2.24	17	1.01	
12658	Dusp28	-2.23	5	1.08	3	0.48	
12659	Efnb3	-2.23	5	0.58	4	0.26	
12660	Lingo1	-2.23	6	0.74	3	0.33	
12661	LOC100362384	-2.23	2	6.52	0	2.93	
12662	Lrrc10b	-2.23	5	1.47	3	0.66	
12663	Muc4	-2.23	7	0.27	4	0.12	
12664	Pcdhb11	-2.23	4	0.78	3	0.35	
12665	Pcsk4	-2.23	19	0.74	10	0.33	
12666	RGD1564469	-2.23	5	2.16	2	0.97	
12667	RGD1566085	-2.23	13	1.89	10	0.85	
12668	Rilp	-2.23	8	1.64	5	0.74	
12669	Sptbn5	-2.23	10	0.29	11	0.13	
12670	1110034G24Rik	-2.23	42	5.38	50	2.41	
12671	AABR07001064.1	-2.23	1	0.65	1	0.29	
12672	AABR07001634.1	-2.23	16	3.7	9	1.66	
12673	AABR07008940.1	-2.23	0	2.13	0	0.95	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12674	AABR07035065.1	-2.23	4	1.17	1	0.52	
12675	Ablim2	-2.23	29	1.78	24	0.8	
12676	AC117142.1	-2.23	0	0.98	0	0.44	
12677	Ankrd37	-2.23	6	2.08	4	0.93	
12678	Atp6v1c2	-2.23	22	1.27	30	0.57	
12679	AY172581.22	-2.23	5	26.24	3	11.77	
12680	Cadm4	-2.23	5	1.26	3	0.57	
12681	Elovl7	-2.23	6	2.02	4	0.91	
12682	Eppin	-2.23	29	1.31	46	0.59	
12683	Fbxo36	-2.23	33	1.64	43	0.73	
12684	Hprt1_1	-2.23	0	2.76	0	1.24	
12685	Kcns3	-2.23	11	0.78	6	0.35	
12686	LOC102552796	-2.23	15	2.25	9	1.01	
12687	Lrrc29	-2.23	20	0.79	21	0.35	
12688	Lrrn1	-2.23	25	2.97	15	1.33	
12689	Mrps18a	-2.23	30	18.16	17	8.15	
12690	Napepld	-2.23	21	1.16	13	0.52	
12691	Npas2	-2.23	22	0.42	11	0.19	
12692	Padi4	-2.23	152	0.8	218	0.36	
12693	Pianp	-2.23	11	1.22	7	0.55	
12694	Reep6	-2.23	17	2.56	12	1.15	
12695	RGD1561648	-2.23	8	0.59	5	0.26	
12696	Rn60_X_0648.1	-2.23	0	1.69	0	0.76	
12697	Rn60_X_0714.1	-2.23	22	1.6	16	0.72	
12698	Sbsn	-2.23	7	0.83	9	0.37	
12699	Tmem223	-2.23	105	50.83	65	22.8	
12700	Tprkb_2	-2.23	0	3.43	0	1.54	
12701	Wnt6	-2.23	23	2.64	18	1.18	
12702	Zfp383_1	-2.23	0	0.64	0	0.29	
12703	Slc26a2	-2.24	109	11.58	84	5.17	
12704	Kcnh2	-2.24	402	27.87	217	12.43	
12705	Slc27a6	-2.25	56	5.63	36	2.51	
12706	Fut4	-2.25	84	7.68	50	3.42	
12707	Dolk	-2.25	116	20.6	68	9.16	
12708	Nphp4	-2.25	88	4.24	53	1.88	
12709	Mrpl27	-2.26	58	25.56	33	11.31	
12710	Naif1	-2.26	23	2.62	13	1.16	
12711	Crispld2	-2.27	738	59.98	464	26.46	
12712	Arrdc4	-2.27	49	3.29	27	1.45	
12713	Mt1_1	-2.27	0	36.3	0	16	
12714	Reep2	-2.27	41	7.43	26	3.28	
12715	Net1	-2.27	559	62.05	327	27.35	
12716	Rn60_10_0892.1	-2.27	27	3.96	18	1.74	
12717	Ephx2	-2.27	20	2.9	14	1.27	
12718	Tnfaip3	-2.27	17	2.52	15	1.11	
12719	Btbd11	-2.27	270	10.78	225	4.74	
12720	RGD1563986	-2.27	26	3.91	28	1.72	
12721	Zdhhc4	-2.28	61	11.95	53	5.24	
12722	Slc25a30	-2.28	543	94.57	337	41.5	
12723	Naglu	-2.28	143	19.59	84	8.59	
12724	Rpl36	-2.28	26	79.7	7	34.9	
12725	Tspan7	-2.29	108	22.54	65	9.85	
12726	Fbxo16	-2.29	23	3.44	19	1.5	
12727	Gpr19	-2.29	22	2.86	11	1.25	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12728	Nat14	-2.29	13	2.86	8	1.25	
12729	Ppil1	-2.29	62	8.72	57	3.8	
12730	Prelp	-2.29	11	1.2	6	0.52	
12731	Prodh	-2.29	18	1.86	12	0.81	
12732	Tubd1	-2.29	15	2.99	11	1.3	
12733	Ptprv	-2.29	40	2.27	20	0.99	
12734	AABR07064716.2	-2.31	0	85.99	0	37.22	
12735	Btbd8_1	-2.31	8	1.68	4	0.73	
12736	Cyp17a1	-2.31	19	3.77	11	1.63	
12737	Fundc2	-2.31	95	19.7	66	8.53	
12738	Kcnk1	-2.31	21	2.7	15	1.17	
12739	Rad54l	-2.31	29	2.46	27	1.07	
12740	Ssbp4	-2.31	197	46.77	119	20.24	
12741	Zfp952	-2.31	32	4.97	26	2.15	
12742	Ss18l1	-2.31	34	5.18	29	2.24	
12743	Katnal1_1	-2.32	1	9.22	0	3.98	
12744	Mycl	-2.32	52	6.4	30	2.76	
12745	Psmb3	-2.32	342	154.67	192	66.69	
12746	Adck1	-2.32	59	5.74	49	2.47	
12747	Cisd1	-2.32	86	32.87	69	14.15	
12748	Ndufa7	-2.33	168	113.05	107	48.54	
12749	Wnt11	-2.33	176	19.07	109	8.18	
12750	Slc27a1	-2.34	703	76.82	413	32.88	
12751	AABR07028012.1	-2.34	13	5.56	9	2.37	
12752	Bloc1s3	-2.34	7	4.31	4	1.84	
12753	Dmtn	-2.34	7	0.75	6	0.32	
12754	Fanca	-2.34	43	2.25	30	0.96	
12755	Iltga9	-2.34	25	1.63	22	0.7	
12756	Kctd14	-2.34	7	1.34	4	0.57	
12757	LOC100362724	-2.34	0	2.43	0	1.04	
12758	LOC100911365	-2.34	0	2.88	0	1.23	
12759	LOC100912391	-2.34	71	8.44	66	3.61	
12760	Lym9	-2.34	25	4.83	20	2.06	
12761	Ptges3l1	-2.34	7	1.58	5	0.67	
12762	Rnf113a1	-2.34	0	2.24	0	0.96	
12763	AABR07000410.1	-2.34	5	0.68	4	0.29	
12764	AABR07063082.1	-2.34	6	1.62	2	0.69	
12765	AABR07071697.1	-2.34	18	5.03	11	2.15	
12766	Cacna1d	-2.34	20	0.26	16	0.11	
12767	Echdc3	-2.34	17	1.77	23	0.76	
12768	Fam227a	-2.34	18	1.1	21	0.47	
12769	Fgfr3	-2.34	11	0.71	4	0.3	
12770	Gprc5b	-2.34	20	0.88	16	0.38	
12771	Gtpbp6_2	-2.34	0	1.64	0	0.7	
12772	LOC100911721	-2.34	1	1.51	0	0.65	
12773	LOC102556347	-2.34	21	18.94	8	8.09	
12774	LOC497963	-2.34	18	0.76	12	0.32	
12775	Lrrc17	-2.34	13	6.14	6	2.62	
12776	Mif4gd	-2.34	76	17.7	44	7.56	
12777	Nfe2	-2.34	8	1.53	8	0.66	
12778	Nsun3	-2.34	16	2.75	21	1.18	
12779	Nxpe3	-2.34	11	0.76	10	0.32	
12780	Pcdhb19	-2.34	7	1.05	4	0.45	
12781	Rnf157	-2.34	21	2.37	22	1.01	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12782	Rpl8	-2.34	0	16.37	0	6.99	
12783	Slc7a11	-2.34	8	0.28	6	0.12	
12784	Slitrk2	-2.34	24	2.58	13	1.1	
12785	Slmo1	-2.34	24	1.94	18	0.83	
12786	Tmem107	-2.34	19	4.88	13	2.09	
12787	Tmem258	-2.34	2	17.98	1	7.68	
12788	Vkorc1	-2.34	86	12.75	51	5.45	
12789	Zfp239	-2.34	7	4.18	4	1.79	
12790	Isoc1	-2.34	179	63.18	108	26.95	
12791	Rpl10a	-2.35	117	235.47	47	100.33	
12792	Slc7a6	-2.35	205	16.36	135	6.97	
12793	Rmnd5b_1	-2.36	0	15.82	0	6.72	
12794	Sphk1	-2.36	45	3.54	25	1.5	
12795	Inhbb	-2.36	720	83.23	418	35.24	
12796	Fads2	-2.37	422	103.64	257	43.82	
12797	Fam210b	-2.38	585	104.25	383	43.87	
12798	Lrrc75b	-2.38	33	1.95	19	0.82	
12799	Lipg	-2.38	38	3.15	20	1.32	
12800	Nxt1	-2.38	41	17.42	25	7.31	
12801	Jund	-2.39	551	119.25	310	49.98	
12802	Sord	-2.39	188	23.89	108	10.01	
12803	Metazoa_SRP_26	-2.39	0	71.45	1	29.88	
12804	Ugt1a8	-2.39	77	2.29	54	0.96	
12805	Tpst2	-2.4	73	10.8	63	4.5	
12806	Fbn2	-2.4	283	12.47	175	5.2	
12807	Epha2	-2.4	414	35.72	235	14.87	
12808	Casq1	-2.41	18	1.77	7	0.73	
12809	Dhrs11	-2.41	47	9.27	39	3.85	
12810	Epcam	-2.41	9	2.23	6	0.93	
12811	Haus2_2	-2.41	3	4.31	1	1.79	
12812	Hjulp	-2.41	51	4.56	30	1.89	
12813	LOC100909732	-2.41	2	1.85	0	0.77	
12814	Mx2	-2.41	26	3.34	15	1.39	
12815	Nhp2_1	-2.41	0	9.79	0	4.06	
12816	Pabpc1l2a	-2.41	27	15.49	15	6.43	
12817	Pcdhb5	-2.41	6	1.26	4	0.52	
12818	Ppapdc1a	-2.41	19	2.62	20	1.09	
12819	Ppp1r35	-2.41	0	2.74	0	1.14	
12820	RGD1562652	-2.41	14	2.88	13	1.2	
12821	Rn60_X_0652.2	-2.41	9	4.93	5	2.05	
12822	Swsap1	-2.41	18	2.8	10	1.16	
12823	Ten1	-2.41	14	3.73	10	1.55	
12824	Acan	-2.41	11	0.47	6	0.2	
12825	Csmd2	-2.41	28	0.31	41	0.13	
12826	Ldoc1l	-2.41	45	22.26	24	9.24	
12827	Mtcp1_2	-2.41	9	11.68	5	4.85	
12828	Pdxk	-2.41	45	12.84	27	5.33	
12829	Rps27	-2.41	271	362.07	169	150.38	
12830	Spata18	-2.41	11	1.55	6	0.64	
12831	Alas1	-2.41	1262	200.34	703	83.04	
12832	Nol4l	-2.41	101	22.36	68	9.26	
12833	H2afz	-2.42	39	153.69	20	63.44	
12834	Trpv4	-2.42	35	3.27	19	1.35	
12835	Hadh	-2.43	187	38.85	117	15.99	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12836	Pde4d	-2.43	176	12.04	165	4.95	
12837	Rims4	-2.43	28	7.38	21	3.04	
12838	AABR07048064.1	-2.44	11	5.85	8	2.4	
12839	Bckdha	-2.44	265	43.92	167	17.99	
12840	Gamt	-2.44	151	36.88	89	15.09	
12841	Gldn	-2.45	78	9.72	41	3.98	
12842	Ccdc142	-2.45	0	1.84	0	0.75	
12843	Ccdc92	-2.45	25	4.08	15	1.66	
12844	Ccpg1os	-2.45	11	5.4	6	2.2	
12845	Cotl1	-2.45	28	4.96	14	2.02	
12846	Gsap	-2.45	18	1.06	13	0.43	
12847	Kcnab3	-2.45	12	1.89	8	0.77	
12848	Oasl	-2.45	14	1.45	8	0.59	
12849	Tmem167b	-2.45	8	6.18	5	2.52	
12850	Efcab6	-2.45	21	0.84	16	0.34	
12851	Gpr162	-2.45	18	1.39	10	0.57	
12852	Man1c1	-2.45	19	0.96	12	0.39	
12853	Med18	-2.45	28	12.77	24	5.21	
12854	Padi6	-2.45	11	1.94	8	0.79	
12855	Map2k6	-2.46	100	5.97	58	2.42	
12856	Aldh2	-2.47	528	93.22	294	37.8	
12857	Cebpa	-2.47	200	27.23	108	11.04	
12858	Alkbh6_1	-2.47	0	9.33	0	3.78	
12859	Il17re	-2.47	26	2.82	19	1.14	
12860	Mmd	-2.47	57	5.98	30	2.42	
12861	Ednrb	-2.48	731	99.14	404	40.05	
12862	Phgdh	-2.48	111	20.48	59	8.26	
12863	AABR07065498.1	-2.48	26	3.64	24	1.47	
12864	Acot3	-2.48	29	3.65	20	1.47	
12865	Trim62	-2.48	96	13.18	74	5.31	
12866	Hmgb3_2	-2.48	3	5.83	2	2.35	
12867	Rcor2	-2.48	0	1.88	0	0.76	
12868	Setbp1	-2.48	30	1.18	24	0.47	
12869	Slc41a3	-2.49	210	21.92	122	8.82	
12870	Serf2	-2.49	326	483.2	161	194.14	
12871	Ccdc134	-2.5	55	10.08	32	4.03	
12872	Flvcr2	-2.5	203	16.59	104	6.63	
12873	Extl2	-2.5	77	11.5	48	4.59	
12874	Fam89b	-2.51	239	71.81	126	28.66	
12875	AABR07069282.1	-2.51	10	1.74	3	0.69	
12876	Notch3	-2.51	15	0.74	10	0.3	
12877	Shf	-2.51	51	6.45	37	2.57	
12878	lhh	-2.51	48	7.49	26	2.98	
12879	AABR07063544.1	-2.52	7	23.54	5	9.36	
12880	Them4	-2.52	37	4.11	22	1.63	
12881	Rmdn2	-2.52	174	11.48	84	4.55	
12882	B3gnt7	-2.53	263	37.07	142	14.66	
12883	Tox	-2.53	401	18.61	237	7.35	
12884	Fam46c	-2.54	120	19.69	67	7.76	
12885	Rpl39_2	-2.54	0	21.23	0	8.35	
12886	Taf1a	-2.54	24	5.06	18	1.99	
12887	Cdc20	-2.55	61	12.45	33	4.88	
12888	Ulk4	-2.55	43	2.03	33	0.79	
12889	Tmem177	-2.55	21	5.26	12	2.06	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12890	Isyna1	-2.56	3424	615.35	1805	240.74	
12891	Pigc	-2.56	0	5.29	1	2.06	
12892	Fdx1	-2.57	241	61.1	160	23.77	
12893	Aldh3b1	-2.57	13	4.1	5	1.59	
12894	Mpp2	-2.57	36	3.77	14	1.47	
12895	Tmem86a	-2.58	193	37.79	101	14.65	
12896	Bloc1s4	-2.59	31	8.59	16	3.32	
12897	Raet1c	-2.6	33	10.08	15	3.88	
12898	Slc19a1	-2.6	39	4.8	24	1.85	
12899	Plxnc1	-2.6	1297	84.67	669	32.54	
12900	Srcin1	-2.6	242	5.6	104	2.15	
12901	Rnasek	-2.61	28	49.26	13	18.87	
12902	LOC100911130	-2.63	0	36.97	0	14.08	
12903	Tkfc	-2.63	57	8.41	32	3.2	
12904	Tmem259	-2.63	141	28.81	65	10.95	
12905	Acaa2	-2.64	150	29.78	75	11.3	
12906	Slc25a10	-2.64	80	13.79	39	5.23	
12907	Hsd17b1	-2.64	174	42.81	85	16.19	
12908	Enc1	-2.65	271	20.72	143	7.8	
12909	Btd	-2.66	230	34.88	162	13.11	
12910	AABR07025023.1	-2.68	2	0.55	1	0.21	
12911	AABR07051190.1	-2.68	2	0.54	1	0.2	
12912	AABR07057150.1	-2.68	0	1.13	0	0.42	
12913	Ccdc114	-2.68	20	0.84	10	0.31	
12914	Cga	-2.68	7	2.16	3	0.81	
12915	Kif17	-2.68	13	0.78	7	0.29	
12916	LOC100910807	-2.68	1	0.28	1	0.11	
12917	LOC100910965	-2.68	0	1.35	0	0.5	
12918	Prkch	-2.68	18	0.71	15	0.26	
12919	Prrg2	-2.68	2	0.51	1	0.19	
12920	Sybu	-2.68	9	0.7	16	0.26	
12921	Xrcc3	-2.68	41	2.76	75	1.03	
12922	1810024B03Rik	-2.68	2	0.35	1	0.13	
12923	5_8S_rRNA_4	-2.68	2	4.7	0	1.76	
12924	AABR07002683.1	-2.68	12	6.04	5	2.26	
12925	AABR07015608.1	-2.68	0	6.41	0	2.4	
12926	AABR07015719.1	-2.68	0	3.13	0	1.17	
12927	AABR07017110.1	-2.68	0	1.6	0	0.6	
12928	AABR07021023.1	-2.68	2	2.24	7	0.84	
12929	AABR07021501.1	-2.68	14	4.88	16	1.82	
12930	AABR07022022.1	-2.68	1	0.75	0	0.28	
12931	AABR07027088.1	-2.68	0	1.57	0	0.59	
12932	AABR07030919.1	-2.68	2	1.78	3	0.67	
12933	AABR07035008.1	-2.68	4	0.31	7	0.12	
12934	AABR07035412.2	-2.68	9	0.71	5	0.26	
12935	AABR07043288.1	-2.68	1	2.91	0	1.09	
12936	AABR07043354.1	-2.68	2	1.16	3	0.43	
12937	AABR07044962.1	-2.68	0	0.37	0	0.14	
12938	AABR07052758.1	-2.68	22	6.25	10	2.34	
12939	AABR07053509.1	-2.68	0	2.19	0	0.82	
12940	AABR07053533.1	-2.68	0	0.81	0	0.3	
12941	AABR07053837.1	-2.68	2	2.14	1	0.8	
12942	AABR07056415.1	-2.68	33	1.05	54	0.39	
12943	AABR07062799.2	-2.68	13	5.79	11	2.17	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12944	AABR07064349.2	-2.68	0	6.83	0	2.55	
12945	AABR07070238.1	-2.68	3	0.87	4	0.32	
12946	Abca8a	-2.68	3	0.13	2	0.05	
12947	Abcg4	-2.68	2	0.37	4	0.14	
12948	AC097037.2	-2.68	1	2.03	0	0.76	
12949	AC099449.1	-2.68	27	1.44	29	0.54	
12950	AC110351.1	-2.68	0	1.81	1	0.68	
12951	AC117925.6	-2.68	0	2.71	0	1.01	
12952	AC120310.2	-2.68	0	0.48	0	0.18	
12953	AC132752.2	-2.68	6	6.9	3	2.58	
12954	ACEA_U3_6	-2.68	0	3.37	0	1.26	
12955	Ache	-2.68	8	0.65	4	0.24	
12956	Acvrl1	-2.68	2	0.2	1	0.07	
12957	Adcy7	-2.68	8	0.52	4	0.2	
12958	Adra2b	-2.68	2	0.18	1	0.07	
12959	Ahsp	-2.68	3	1.3	1	0.49	
12960	Alox5ap	-2.68	4	0.73	1	0.27	
12961	Ampd1	-2.68	4	0.3	4	0.11	
12962	Arhgap4	-2.68	8	0.68	6	0.25	
12963	Arhgef19	-2.68	3	0.2	3	0.07	
12964	Arhgef9	-2.68	55	2.17	58	0.81	
12965	Asic4	-2.68	9	0.83	7	0.31	
12966	B4galnt4	-2.68	4	0.36	2	0.13	
12967	Bcl11b	-2.68	4	0.25	7	0.09	
12968	Bco2	-2.68	5	0.25	3	0.09	
12969	Blvrb	-2.68	91	19.74	65	7.38	
12970	Bola1	-2.68	10	4.85	6	1.81	
12971	Brinp3	-2.68	14	0.24	46	0.09	
12972	Cacna1a	-2.68	9	0.08	7	0.03	
12973	Capn12	-2.68	5	0.25	5	0.09	
12974	Cbln2	-2.68	2	0.31	1	0.12	
12975	Cbs	-2.68	4	0.27	3	0.1	
12976	Ccdc69	-2.68	18	1.51	7	0.57	
12977	Ccer2	-2.68	3	0.88	2	0.33	
12978	Cdh8	-2.68	10	0.13	7	0.05	
12979	Chrd	-2.68	8	0.89	4	0.33	
12980	Chrna5	-2.68	5	0.24	1	0.09	
12981	Chst7	-2.68	9	1.26	5	0.47	
12982	Clic3	-2.68	2	0.23	1	0.09	
12983	Clmp	-2.68	8	0.19	6	0.07	
12984	Cml5	-2.68	43	1.22	37	0.45	
12985	Cntn1	-2.68	7	0.18	3	0.07	
12986	Cntnap5b	-2.68	349	0.18	424	0.07	
12987	Cntnap5c	-2.68	29	0.19	40	0.07	
12988	Commd5	-2.68	0	2.15	0	0.8	
12989	Cox6b2	-2.68	2	1.54	1	0.58	
12990	Cracr2a	-2.68	2	0.78	3	0.29	
12991	Crct1	-2.68	2	2.39	1	0.89	
12992	Crisp3	-2.68	4	0.51	1	0.19	
12993	Ctrl	-2.68	2	0.91	2	0.34	
12994	Cxxc5_2	-2.68	2	0.8	0	0.3	
12995	Cyp4f6	-2.68	0	0.31	1	0.12	
12996	Dcst1	-2.68	8	0.25	2	0.09	
12997	Dennd2d	-2.68	2	0.38	1	0.14	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
12998	Depdc1b	-2.68	15	1.45	14	0.54	
12999	Dnah2	-2.68	5	0.05	4	0.02	
13000	Drgx	-2.68	5	0.6	7	0.23	
13001	Duox2	-2.68	5	0.26	2	0.1	
13002	Dusp15	-2.68	10	1.16	6	0.43	
13003	Egfl8	-2.68	1	0.53	0	0.2	
13004	Epn3	-2.68	2	0.21	2	0.08	
13005	Eva1a	-2.68	4	0.42	6	0.16	
13006	Faah_1	-2.68	0	1.66	0	0.62	
13007	Fam195a	-2.68	14	2.65	10	0.99	
13008	Fam72a	-2.68	5	2.05	5	0.76	
13009	Flt4	-2.68	8	0.51	6	0.19	
13010	Gabrp	-2.68	7	0.52	14	0.2	
13011	Gramd1c_2	-2.68	3	1.53	2	0.57	
13012	Grhl3	-2.68	5	0.29	1	0.11	
13013	Gtf2a1l	-2.68	7	0.43	8	0.16	
13014	H1foo	-2.68	2	0.63	1	0.24	
13015	Hist1h1d	-2.68	4	2.19	2	0.82	
13016	Hist1h3f	-2.68	0	1.76	0	0.66	
13017	Hist1h4b_4	-2.68	2	2.32	1	0.87	
13018	Hoxd3	-2.68	2	0.29	2	0.11	
13019	Hs6st2	-2.68	20	0.37	19	0.14	
13020	Ifit2	-2.68	2	0.21	2	0.08	
13021	Igfbp3	-2.68	3	0.3	1	0.11	
13022	Il15	-2.68	12	2.96	24	1.11	
13023	Kcnj9	-2.68	3	0.29	6	0.11	
13024	L1td1	-2.68	4	0.6	2	0.23	
13025	Lamc3	-2.68	5	0.15	6	0.06	
13026	Lancl3	-2.68	12	1.15	12	0.43	
13027	Lhx8	-2.68	2	0.41	3	0.15	
13028	Lmo2	-2.68	31	4.35	16	1.62	
13029	LOC100359574	-2.68	0	1.87	0	0.7	
13030	LOC100360411	-2.68	3	0.45	1	0.17	
13031	LOC100361811	-2.68	4	5.23	1	1.95	
13032	LOC100362344	-2.68	0	0.62	0	0.23	
13033	LOC100362965	-2.68	0	3.35	0	1.25	
13034	LOC100910646	-2.68	0	0.98	0	0.37	
13035	LOC100910934	-2.68	0	0.58	0	0.22	
13036	LOC100911109	-2.68	0	0.5	0	0.19	
13037	LOC100911374	-2.68	1	1.26	1	0.47	
13038	LOC100912008	-2.68	2	0.74	1	0.28	
13039	LOC100912262	-2.68	0	0.38	0	0.14	
13040	LOC102550734	-2.68	0	3.86	0	1.44	
13041	LOC681195	-2.68	0	1.5	0	0.56	
13042	LOC683844	-2.68	0	3.11	0	1.16	
13043	LOC691909	-2.68	1	0.49	1	0.18	
13044	Lonrf3	-2.68	7	0.47	6	0.18	
13045	Lppr3	-2.68	4	1.14	2	0.42	
13046	Mdfi	-2.68	4	0.9	10	0.34	
13047	Mfn2	-2.68	0	0.32	0	0.12	
13048	Mgam	-2.68	4	0.11	5	0.04	
13049	Miip	-2.68	21	12.07	9	4.51	
13050	Mir671	-2.68	0	7.39	0	2.76	
13051	Msln1	-2.68	1	0.35	4	0.13	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13052	Msr1	-2.68	173	0.25	236	0.09	
13053	Mtmr7	-2.68	9	0.52	16	0.19	
13054	Nanos3	-2.68	8	0.98	13	0.37	
13055	Nat1	-2.68	0	0.36	1	0.13	
13056	Ndst3	-2.68	5	0.26	4	0.1	
13057	Necab1	-2.68	22	0.33	39	0.12	
13058	Nfkbid	-2.68	8	1.59	5	0.6	
13059	Nhsl2	-2.68	6	0.58	5	0.22	
13060	Nmu	-2.68	3	1.02	1	0.38	
13061	Nsg1	-2.68	5	0.9	5	0.34	
13062	Nsg2	-2.68	4	0.32	1	0.12	
13063	Ntpcr	-2.68	45	12.79	28	4.78	
13064	Nupr1l	-2.68	2	2.32	1	0.87	
13065	P2ry2	-2.68	2	0.42	1	0.16	
13066	P4htm	-2.68	37	5.75	16	2.15	
13067	Pbx4	-2.68	20	0.52	12	0.2	
13068	Perm1	-2.68	2	0.19	1	0.07	
13069	Pi16	-2.68	12	1.54	11	0.58	
13070	Pkd2l2	-2.68	13	0.59	9	0.22	
13071	Plac9	-2.68	4	0.76	3	0.29	
13072	Pls1	-2.68	2	0.2	3	0.08	
13073	Pm20d1	-2.68	4	0.4	2	0.15	
13074	Pm20d2	-2.68	6	0.56	2	0.21	
13075	Pnma1	-2.68	2	0.41	1	0.15	
13076	Pou2f2	-2.68	2	0.13	5	0.05	
13077	Ppil6	-2.68	8	0.76	2	0.29	
13078	Prkcz	-2.68	6	0.2	6	0.08	
13079	Psat1	-2.68	14	1.54	6	0.57	
13080	Rag1	-2.68	2	0.11	1	0.04	
13081	Ras12	-2.68	4	0.3	3	0.11	
13082	RGD1306227	-2.68	38	4.41	26	1.65	
13083	RGD1560010	-2.68	14	2.62	7	0.98	
13084	RGD1560289	-2.68	11	0.8	12	0.3	
13085	RGD1561157	-2.68	4	1.73	2	0.65	
13086	RGD1561381	-2.68	2	1.59	1	0.59	
13087	RGD1563220	-2.68	0	0.9	1	0.34	
13088	RGD1563815	-2.68	7	0.23	5	0.09	
13089	RGD1565415	-2.68	1	1.62	1	0.61	
13090	Rhbdl1	-2.68	4	0.96	2	0.36	
13091	Rn60_19_0291.1	-2.68	3	0.89	2	0.33	
13092	Rn60_20_0055.3	-2.68	0	1.34	1	0.5	
13093	Rpl27-1l	-2.68	1	1.76	1	0.66	
13094	Rpl5l1	-2.68	4	2.44	3	0.91	
13095	RT1-N2	-2.68	2	0.36	1	0.14	
13096	S100b	-2.68	11	2.44	6	0.91	
13097	Sap18	-2.68	0	1.4	0	0.52	
13098	Scgb1c1	-2.68	2	1.58	2	0.59	
13099	Scly	-2.68	8	0.66	10	0.25	
13100	Sec14l2	-2.68	12	0.84	9	0.31	
13101	Sept1	-2.68	3	0.51	2	0.19	
13102	Sepw1	-2.68	0	5.42	0	2.03	
13103	Sh3d21	-2.68	7	0.38	6	0.14	
13104	Slc22a3	-2.68	2	0.21	3	0.08	
13105	Slc6a1	-2.68	2	0.18	1	0.07	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13106	SNORD105	-2.68	0	17.24	0	6.45	
13107	SNORD53_SNORD5	-2.68	0	8.14	0	3.04	
13108	Snrpd2l	-2.68	0	2.03	0	0.76	
13109	Sox8	-2.68	2	0.22	1	0.08	
13110	Spry3	-2.68	3	0.22	1	0.08	
13111	Ssc4d	-2.68	29	4.11	19	1.54	
13112	Tekt1	-2.68	20	2.53	16	0.95	
13113	Tsga10ip	-2.68	23	0.29	39	0.11	
13114	Ttc9	-2.68	4	0.63	3	0.23	
13115	U3_6	-2.68	0	3.37	0	1.26	
13116	Unc13d	-2.68	3	0.18	1	0.07	
13117	Vwa3a	-2.68	13	0.35	8	0.13	
13118	Wdr27	-2.68	15	0.51	19	0.19	
13119	Wfdc10	-2.68	20	14.87	10	5.56	
13120	Xirp1	-2.68	3	0.12	1	0.04	
13121	Xirp2	-2.68	3	0.06	1	0.02	
13122	Zbtb33	-2.68	0	0.3	0	0.11	
13123	Zfp428	-2.68	8	1.53	11	0.57	
13124	AABR07005533.1	-2.68	1	0.55	0	0.21	
13125	AABR07028027.1	-2.68	0	0.57	0	0.21	
13126	AABR07042904.1	-2.68	0	0.41	1	0.15	
13127	AABR07051592.1	-2.68	2	0.69	1	0.26	
13128	AABR07061328.1	-2.68	3	0.14	3	0.05	
13129	AABR07061336.3	-2.68	0	5.14	0	1.92	
13130	AABR07062129.1	-2.68	3	2.04	2	0.76	
13131	AABR07068285.2	-2.68	3	1.28	1	0.48	
13132	AC113925.2	-2.68	1	2.32	1	0.87	
13133	AC130741.1	-2.68	2	1.2	1	0.45	
13134	Akr1c12l1	-2.68	1	0.59	1	0.22	
13135	Ankrd29_2	-2.68	4	0.64	2	0.24	
13136	Arrb1	-2.68	68	2.13	101	0.79	
13137	Camkv	-2.68	3	0.2	2	0.07	
13138	Cfap53	-2.68	22	1.06	25	0.39	
13139	Clec2dl1	-2.68	37	0.67	28	0.25	
13140	Clgn	-2.68	2	0.32	3	0.12	
13141	Dock2	-2.68	12	0.86	11	0.32	
13142	Egfl7	-2.68	7	0.99	3	0.37	
13143	Extl1	-2.68	2	0.18	2	0.07	
13144	Faim_1	-2.68	0	0.63	0	0.23	
13145	Fam131c	-2.68	2	0.53	1	0.2	
13146	Fam46b	-2.68	4	0.57	2	0.21	
13147	Fgf18	-2.68	11	1.3	7	0.49	
13148	Gkn2	-2.68	2	1.01	1	0.38	
13149	Igln5	-2.68	12	4.3	8	1.61	
13150	Igsf9b	-2.68	14	1.09	9	0.41	
13151	Kcnn1	-2.68	8	0.82	9	0.31	
13152	Klrb1b	-2.68	11	0.26	64	0.1	
13153	Kndc1	-2.68	4	0.14	2	0.05	
13154	Lce1m	-2.68	11	4.37	7	1.63	
13155	LOC100362684	-2.68	0	2.01	0	0.75	
13156	LOC100910336	-2.68	0	9.17	0	3.43	
13157	LOC100911034	-2.68	1	0.52	0	0.2	
13158	Nfam1	-2.68	2	0.21	1	0.08	
13159	Notum	-2.68	4	0.71	5	0.27	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13160	P2rx5	-2.68	2	0.12	2	0.04	
13161	Pelo	-2.68	6	2.27	2	0.85	
13162	Pif1	-2.68	4	0.38	6	0.14	
13163	Rdh5	-2.68	3	0.31	7	0.12	
13164	RGD1304870	-2.68	6	6.19	3	2.31	
13165	Rn60_12_0174.1	-2.68	1	0.72	0	0.27	
13166	Slc25a21	-2.68	20	1.03	18	0.38	
13167	Spdya	-2.68	8	0.32	8	0.12	
13168	Spire2	-2.68	3	0.32	1	0.12	
13169	Tlr8	-2.68	2	0.21	2	0.08	
13170	Kit	-2.7	106	6.81	57	2.52	
13171	Arf6	-2.71	234	74.18	115	27.38	
13172	Fbxo31	-2.71	88	11.43	58	4.22	
13173	Hmox1	-2.72	66	13.64	32	5.01	
13174	Mpst	-2.72	120	33.92	60	12.46	
13175	Sema7a	-2.74	395	50.95	195	18.58	
13176	Fam198a	-2.75	61	5.86	40	2.13	
13177	Troap	-2.75	45	5.62	23	2.04	
13178	Pidd1	-2.76	8	3.6	2	1.3	
13179	Fam43a	-2.76	97	14.73	47	5.34	
13180	AY172581.21	-2.77	145	749.64	71	270.69	
13181	Mov10	-2.78	359	29.27	189	10.54	
13182	Apc2	-2.78	28	0.99	13	0.36	
13183	Spock2	-2.79	83	13.6	42	4.87	
13184	SNORD44_1	-2.81	21	124.65	10	44.38	
13185	LOC100360117	-2.82	0	17.41	0	6.18	
13186	Abo	-2.82	19	4.13	11	1.46	
13187	Cntnap1	-2.82	23	1.28	9	0.45	
13188	Hcn2	-2.84	60	7.27	29	2.56	
13189	Slc50a1	-2.84	59	18.37	31	6.46	
13190	Id4	-2.84	17	3.79	9	1.33	
13191	N6amt1	-2.84	24	5.19	19	1.83	
13192	Sema4a	-2.84	22	1.82	14	0.64	
13193	Pdpx	-2.85	34	5.83	16	2.04	
13194	Kif18b	-2.86	55	4.94	28	1.73	
13195	Kcnt1	-2.86	163	6.74	78	2.36	
13196	Angptl1	-2.87	122	2.14	132	0.75	
13197	Asb15	-2.87	16	1.28	14	0.45	
13198	Unc5d	-2.87	58	3.6	27	1.26	
13199	Gemin7	-2.87	19	5.27	14	1.84	
13200	Tubg2	-2.87	10	3.36	5	1.17	
13201	Tmem206	-2.88	400	88.31	188	30.68	
13202	Ppt2	-2.88	99	24.34	31	8.45	
13203	Car14	-2.88	40	8.11	26	2.82	
13204	Pop1	-2.88	35	2.89	20	1	
13205	AABR07028245.1	-2.89	0	4.97	0	1.72	
13206	Tgfb1	-2.89	59	7.32	28	2.53	
13207	Rassf2	-2.89	58	5.74	27	1.99	
13208	Chrna7	-2.9	16	1.56	9	0.54	
13209	LOC689757	-2.9	64	4.68	62	1.61	
13210	Adgrb1	-2.9	102	4.86	46	1.67	
13211	Dhrs1	-2.92	126	19.26	87	6.61	
13212	Inhba	-2.92	2225	299.69	1034	102.6	
13213	Hist1h2bg	-2.93	16	13.35	5	4.56	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13214	Hacd2	-2.93	307	54.9	197	18.75	
13215	Chst8	-2.94	352	42.95	220	14.61	
13216	LOC100910109	-2.94	0	4.69	0	1.59	
13217	Bola3	-2.94	21	3.64	15	1.24	
13218	Cldn11	-2.94	22	4.3	12	1.46	
13219	LOC100910017	-2.94	0	9.28	0	3.15	
13220	Ns5atp9	-2.94	9	11.96	4	4.06	
13221	Them5	-2.94	22	3.31	14	1.13	
13222	Galnt6	-2.94	43	3.15	15	1.07	
13223	SNORD82	-2.94	0	55.32	0	18.8	
13224	LOC100909555	-2.97	36245	2723.77	25228	916.79	
13225	Asphd2	-2.97	128	12.5	61	4.2	
13226	Kcnk5	-2.97	22	2.09	16	0.7	
13227	Tsen34_1	-2.98	0	18.89	0	6.34	
13228	AABR07032261.1	-3.01	9	6.35	4	2.11	
13229	Aldh1l1	-3.01	14	1.08	7	0.36	
13230	Hspa2	-3.01	30	3.91	12	1.3	
13231	LOC100363943	-3.01	14	4.54	9	1.51	
13232	Notch1	-3.01	30	1.03	12	0.34	
13233	RGD1565367	-3.01	21	1.64	16	0.54	
13234	Emilin1	-3.01	10	0.85	5	0.28	
13235	Fkbpl	-3.01	3	2.52	1	0.84	
13236	Ggact	-3.01	30	6.45	16	2.14	
13237	Gpt	-3.01	21	3.75	11	1.24	
13238	LOC100911727	-3.01	0	1.3	0	0.43	
13239	LOC102553099	-3.01	0	6.33	0	2.1	
13240	Nav1	-3.01	15	0.47	13	0.16	
13241	Rn60_1_0959.1	-3.01	8	1.87	2	0.62	
13242	Saysd1	-3.01	15	5.78	14	1.92	
13243	Kirrel3	-3.01	40	0.94	33	0.31	
13244	Exoc3l2	-3.02	64	7.66	30	2.54	
13245	Kcng2	-3.03	63	6.7	23	2.21	
13246	Tmem161a	-3.04	81	12.85	39	4.23	
13247	Anapc13	-3.04	10	14.69	8	4.83	
13248	LOC100911154	-3.06	4860	697	2089	228.04	
13249	Adcyap1r1	-3.06	37	1.8	16	0.59	
13250	Ephb3	-3.06	23	1.45	11	0.47	
13251	LOC100912538	-3.06	0	5.76	0	1.89	
13252	Rbpj_1	-3.06	8	3.94	6	1.29	
13253	Tle2	-3.06	17	2.04	8	0.67	
13254	Rasd1	-3.07	244	52.75	106	17.2	
13255	Mis18a	-3.08	58	11.17	37	3.63	
13256	Pdf	-3.08	28	11.96	14	3.89	
13257	Rasal1	-3.09	33	3.35	17	1.09	
13258	Celsr2	-3.1	312	10.65	136	3.43	
13259	Pitpnm3	-3.11	101	3.9	58	1.25	
13260	Calml3	-3.11	86	22.65	36	7.28	
13261	AABR07040624.1	-3.12	13	16.57	5	5.31	
13262	AC103129.2	-3.12	0	1.73	0	0.55	
13263	Ccl5	-3.12	7	4.65	3	1.49	
13264	Mapt	-3.12	12	0.4	15	0.13	
13265	Rn60_X_0224.3	-3.12	38	3.88	38	1.24	
13266	RT1-CE7	-3.12	9	2.07	5	0.66	
13267	Vwa5b2	-3.12	12	0.56	8	0.18	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13268	AABR07040622.1	-3.12	5	2.87	3	0.92	
13269	B3gnt1	-3.12	0	2.03	0	0.65	
13270	Ceacam18	-3.12	9	2.23	6	0.71	
13271	LOC100361636	-3.12	1	1.02	1	0.33	
13272	Nxpe2	-3.16	17	5.65	6	1.79	
13273	Plekhd1	-3.16	28	2.8	18	0.89	
13274	Hmgb2	-3.18	18	11.94	7	3.76	
13275	Casc5	-3.21	25	1.07	13	0.33	
13276	Igf2	-3.21	13	0.77	4	0.24	
13277	LOC100911840	-3.21	2	4.28	2	1.33	
13278	RGD1310335	-3.21	13	1.59	7	0.5	
13279	Slc7a7	-3.21	42	4.88	30	1.52	
13280	Cyp2t1	-3.21	20	2.3	9	0.72	
13281	Wdr78	-3.21	31	1.17	36	0.36	
13282	Prkce	-3.23	89	10.85	55	3.36	
13283	Dpf1	-3.24	47	7.09	25	2.19	
13284	Prlr	-3.24	265	5.6	160	1.73	
13285	Inha	-3.25	14653	3720.95	6064	1146.2	
13286	AABR07052523.1	-3.25	2	3.69	2	1.14	
13287	LOC688932	-3.28	1	5.04	1	1.54	
13288	Slc7a4	-3.28	27	4.15	11	1.27	
13289	Mmd2	-3.28	37	4.56	16	1.39	
13290	Tmco3	-3.3	10	4.63	4	1.4	
13291	Folr1	-3.32	80	26.81	32	8.07	
13292	Sox18	-3.34	40	8.86	17	2.65	
13293	1700109H08Rik	-3.34	6	1.28	12	0.38	
13294	AABR07018857.1	-3.34	5	4.71	2	1.41	
13295	AC117869.1	-3.34	3	4.22	1	1.26	
13296	AC133403.1	-3.34	2	1.03	0	0.31	
13297	Ankrd55	-3.34	20	0.63	13	0.19	
13298	Ccdc71l	-3.34	5	2.78	2	0.83	
13299	Cd80	-3.34	5	0.41	3	0.12	
13300	Cdkl4	-3.34	6	2.08	6	0.62	
13301	Fbxl16	-3.34	4	1.26	2	0.38	
13302	Hapln1	-3.34	6	0.36	4	0.11	
13303	LOC100362176	-3.34	5	2.43	2	0.73	
13304	LOC257642	-3.34	12	23.82	5	7.12	
13305	Mmp15	-3.34	6	0.45	4	0.14	
13306	Pllp	-3.34	12	1.23	10	0.37	
13307	RGD1565904	-3.34	0	4	0	1.2	
13308	RGD1566099	-3.34	7	2.15	3	0.64	
13309	Tnfaip8l2	-3.34	9	1.31	11	0.39	
13310	Wdr89	-3.34	16	2.59	6	0.77	
13311	Zfp146	-3.34	0	2.06	0	0.62	
13312	Zfp74_2	-3.34	0	0.88	0	0.26	
13313	Dpm3	-3.34	10	9.19	4	2.75	
13314	Eva1b	-3.34	5	1.68	2	0.5	
13315	Fads6	-3.34	58	10.08	25	3.01	
13316	Hexim2	-3.34	8	1.25	5	0.37	
13317	LOC100361854	-3.34	0	5.2	0	1.56	
13318	Mapk4	-3.34	6	0.39	5	0.12	
13319	Oasl2	-3.34	5	0.65	5	0.19	
13320	Pla2g1b	-3.34	5	3.19	3	0.95	
13321	Shc2	-3.34	7	0.46	4	0.14	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13322	Zc3h12b	-3.34	12	1.14	10	0.34	
13323	Crabp2_2	-3.42	202	108.76	65	31.85	
13324	LOC100360491	-3.42	77	146.96	20	42.96	
13325	RGD1566320	-3.44	19	10.09	10	2.93	
13326	Gcat	-3.44	18	4.15	7	1.21	
13327	Arrdc2	-3.48	16	2.03	6	0.58	
13328	LOC100912534	-3.48	2	5.96	1	1.71	
13329	RGD1359290	-3.48	20	7.1	18	2.04	
13330	AABR07053879.1	-3.48	2	4.81	1	1.38	
13331	AC117925.2	-3.48	0	5.23	0	1.5	
13332	Dnm1	-3.48	23	1.47	9	0.42	
13333	Hist3h2ba	-3.48	5	7.47	3	2.15	
13334	Cyp11a1	-3.52	686	102.64	269	29.17	
13335	Sgk1	-3.53	749	73.46	291	20.8	
13336	Fam110c	-3.54	46	5.24	17	1.48	
13337	Fbxo44	-3.54	175	39.31	72	11.1	
13338	Pycr1	-3.57	8	2.31	3	0.65	
13339	Angptl2	-3.57	6	1.36	2	0.38	
13340	Cntfr	-3.57	10	1.56	5	0.44	
13341	Hsf2bp	-3.57	21	1.08	17	0.3	
13342	Mt1m	-3.57	1	7.74	0	2.17	
13343	Cabp4	-3.57	20	2.01	13	0.56	
13344	Dnah9	-3.57	36	0.22	22	0.06	
13345	Fdxr	-3.57	217	36.78	77	10.29	
13346	Dysf	-3.68	19	0.59	7	0.16	
13347	E2f7	-3.68	33	2.36	24	0.64	
13348	Mepce	-3.68	0	2.01	0	0.55	
13349	Dner	-3.68	13	2.6	5	0.71	
13350	Osgin1	-3.68	12	1.81	4	0.49	
13351	Tenm2	-3.68	36	0.43	16	0.12	
13352	Calr3	-3.68	12	2.85	5	0.78	
13353	LOC100910252	-3.68	17	2.69	11	0.73	
13354	Exoc3l1	-3.7	46	5.19	17	1.4	
13355	Tst	-3.71	140	48.7	55	13.13	
13356	Acpp	-3.72	25	1.6	12	0.43	
13357	Efna1	-3.75	14	3.3	5	0.88	
13358	LOC100360977	-3.75	3	13.2	0	3.52	
13359	Nol12	-3.75	18	4.07	8	1.09	
13360	Lilrb3l	-3.76	212	4.19	272	1.12	
13361	Rxrg	-3.77	33	5.29	11	1.4	
13362	Psmb8	-3.79	9	2.98	3	0.79	
13363	Olfm2	-3.79	24	1.22	12	0.32	
13364	Tmem167a	-3.79	29	28.5	22	7.52	
13365	Tmem203	-3.79	17	7.42	6	1.96	
13366	LOC100360679	-3.79	40	469.62	19	123.86	
13367	Rcn3	-3.81	43	7.84	21	2.06	
13368	Rasa4	-3.82	30	2.58	14	0.68	
13369	Tert	-3.85	31	2.47	15	0.64	
13370	Myo7a	-3.86	64	2.61	22	0.68	
13371	Slit3	-3.86	32	1.63	19	0.42	
13372	LOC685186	-3.89	208	778.1	51	200.25	
13373	Scarb1	-3.89	4486	573.11	1637	147.37	
13374	Lhcgr	-3.92	419	50.96	139	13	
13375	LOC100362830	-3.94	40	118.27	12	30.03	



Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13376	Timm17b	-3.94	0	36.97	0	9.39	
13377	Phlda3	-3.95	61	15.01	22	3.8	
13378	5_8S_rRNA_20	-4.01	0	7.1	0	1.77	
13379	A3galt2	-4.01	4	0.57	3	0.14	
13380	AABR07072639.1	-4.01	5	1.15	6	0.29	
13381	Apol9a	-4.01	1	0.67	0	0.17	
13382	Cadm2	-4.01	11	0.56	13	0.14	
13383	Cyb5d2	-4.01	14	1.5	12	0.37	
13384	lsm2	-4.01	5	0.74	1	0.18	
13385	Kcnab2	-4.01	12	0.55	7	0.14	
13386	Klhl3	-4.01	16	0.78	5	0.19	
13387	Lag3	-4.01	4	0.58	2	0.15	
13388	LOC100909485	-4.01	0	1.39	0	0.35	
13389	LOC691354	-4.01	9	1.04	13	0.26	
13390	Rftn2	-4.01	9	0.73	7	0.18	
13391	Rpgrip1	-4.01	18	0.2	21	0.05	
13392	Scn8a	-4.01	6	0.16	10	0.04	
13393	Sgsm1	-4.01	1	0.19	1	0.05	
13394	AABR07002928.1	-4.01	11	0.54	3	0.13	
13395	AABR07010570.1	-4.01	0	1.67	0	0.42	
13396	AABR07020860.1	-4.01	1	0.32	0	0.08	
13397	AABR07034833.1	-4.01	3	3.62	2	0.9	
13398	AABR07037412.2	-4.01	0	0.91	0	0.23	
13399	AABR07048957.1	-4.01	0	2.6	0	0.65	
13400	AABR07051376.1	-4.01	7	1.61	3	0.4	
13401	AABR07064099.1	-4.01	0	0.88	0	0.22	
13402	AABR07064634.1	-4.01	2	2.81	0	0.7	
13403	AC110981.1	-4.01	1	1.29	1	0.32	
13404	AC118794.1	-4.01	6	0.09	10	0.02	
13405	AC119015.2	-4.01	37	7.47	28	1.86	
13406	Ager	-4.01	4	1.19	1	0.3	
13407	Bola2	-4.01	1	4.21	0	1.05	
13408	Calml5	-4.01	10	1.8	3	0.45	
13409	Camk2n2	-4.01	3	2.46	3	0.61	
13410	Cd99l2_1	-4.01	10	1.54	4	0.38	
13411	Cdh18	-4.01	17	0.47	14	0.12	
13412	Cenpm	-4.01	15	1.56	7	0.39	
13413	Cftr	-4.01	12	0.32	8	0.08	
13414	Chac1	-4.01	3	0.69	1	0.17	
13415	Chit1	-4.01	4	0.47	1	0.12	
13416	Chtf18	-4.01	18	1.84	7	0.46	
13417	Creb3l4	-4.01	1	0.41	1	0.1	
13418	Def6	-4.01	18	1.75	7	0.44	
13419	Drp2	-4.01	7	0.16	2	0.04	
13420	Dtx1	-4.01	16	1.73	7	0.43	
13421	Ebf3	-4.01	4	0.22	3	0.06	
13422	Emx2	-4.01	3	0.37	2	0.09	
13423	ENSRNOG000000056	-4.01	13	0.39	3	0.1	
13424	Esrrg	-4.01	10	0.2	7	0.05	
13425	Fam180a	-4.01	4	0.62	5	0.16	
13426	Fgf11	-4.01	3	0.37	1	0.09	
13427	Gdf9	-4.01	6	1.57	2	0.39	
13428	Gpd1	-4.01	6	0.76	2	0.19	
13429	Gpr165	-4.01	3	0.18	1	0.04	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13430	Gpr63	-4.01	7	0.45	4	0.11	
13431	Gulo	-4.01	3	0.47	1	0.12	
13432	Hipk4	-4.01	3	0.45	14	0.11	
13433	Hsd17b3	-4.01	7	0.98	11	0.24	
13434	Inpp5d	-4.01	8	0.44	5	0.11	
13435	Klhl30	-4.01	3	0.4	1	0.1	
13436	Krt14	-4.01	3	0.51	0	0.13	
13437	LOC100360619	-4.01	1	3.52	1	0.88	
13438	LOC100910951	-4.01	7	5.9	1	1.47	
13439	LOC100911851	-4.01	0	0.27	0	0.07	
13440	LOC100911963	-4.01	0	2.12	0	0.53	
13441	LOC102553180	-4.01	6	0.91	2	0.23	
13442	LOC687679	-4.01	1	8.53	0	2.13	
13443	Lrrc73	-4.01	3	0.84	2	0.21	
13444	Lrtomt	-4.01	3	1.24	5	0.31	
13445	Ly6d	-4.01	3	1.55	1	0.39	
13446	Mapk12	-4.01	4	0.5	5	0.12	
13447	Mas1	-4.01	5	0.54	10	0.14	
13448	Mast4_1	-4.01	0	0.14	0	0.04	
13449	Medag	-4.01	7	0.49	3	0.12	
13450	Mfsd2a	-4.01	15	1.53	4	0.38	
13451	Mst1r	-4.01	3	0.26	1	0.07	
13452	Mtnr1a	-4.01	5	0.61	2	0.15	
13453	Nos3	-4.01	4	0.2	2	0.05	
13454	Ocln	-4.01	5	0.25	4	0.06	
13455	Phyhip_2	-4.01	0	4.7	0	1.17	
13456	Piwil2	-4.01	14	0.21	11	0.05	
13457	Pramef8	-4.01	3	0.59	1	0.15	
13458	Ptgds	-4.01	6	2.76	2	0.69	
13459	Ptprz1	-4.01	12	0.28	9	0.07	
13460	Rapsn	-4.01	16	1.97	5	0.49	
13461	Rbp1	-4.01	4	1.56	1	0.39	
13462	RGD1560617	-4.01	0	0.94	1	0.23	
13463	RGD1562063	-4.01	4	0.21	1	0.05	
13464	RGD1563905	-4.01	2	1.86	1	0.46	
13465	RGD1566136	-4.01	5	3.73	1	0.93	
13466	Rln1	-4.01	3	1.37	1	0.34	
13467	Rn60_12_0174.2	-4.01	1	1.04	0	0.26	
13468	Rn60_14_0449.2	-4.01	0	2.41	0	0.6	
13469	Rn60_5_0825.2	-4.01	3	1.65	1	0.41	
13470	Rn60_5_1607.1	-4.01	2	1.72	1	0.43	
13471	Rnf208	-4.01	7	1.91	2	0.48	
13472	Rpl26-ps1	-4.01	0	2.48	0	0.62	
13473	Rpl37-ps1	-4.01	0	3.69	0	0.92	
13474	Rps29_4	-4.01	1	7.17	1	1.79	
13475	Samd5	-4.01	13	0.87	4	0.22	
13476	Scarf1	-4.01	5	0.8	2	0.2	
13477	Slc29a2	-4.01	0	0.79	0	0.2	
13478	SNORA61_15	-4.01	0	8.36	0	2.08	
13479	Taf9	-4.01	1	4.25	0	1.06	
13480	Tbcc	-4.01	0	0.94	0	0.23	
13481	Thegl	-4.01	6	0.41	2	0.1	
13482	Timm13	-4.01	50	21.59	16	5.38	
13483	Tlr12	-4.01	3	0.25	1	0.06	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13484	Tppp	-4.01	8	1.73	2	0.43	
13485	Trim45	-4.01	15	1.88	5	0.47	
13486	Trim7	-4.01	95	12.75	30	3.18	
13487	Tssk3	-4.01	9	1.95	3	0.49	
13488	Tssk6	-4.01	3	0.83	1	0.21	
13489	Unc13a	-4.01	12	0.63	4	0.16	
13490	Wfdc6a	-4.01	18	1.44	10	0.36	
13491	Zim1	-4.01	2	0.35	2	0.09	
13492	Ptx3	-4.08	14	11.48	5	2.81	
13493	Rpl31l4	-4.12	2	30.87	0	7.48	
13494	Ddit4	-4.13	175	36.42	57	8.81	
13495	C1qtnf6	-4.15	31	3.78	11	0.91	
13496	Kcnq1	-4.15	123	2.81	135	0.68	
13497	Phf7	-4.2	33	4.81	43	1.14	
13498	Rps2_2	-4.23	77	409.28	12	96.68	
13499	Tuba4a	-4.28	11	4	6	0.93	
13500	Mfsd4	-4.28	7	1.61	6	0.38	
13501	RGD1561333	-4.28	1	14.97	0	3.5	
13502	Sorcs2	-4.28	26	0.89	14	0.21	
13503	Enkd1	-4.35	11	3.07	4	0.71	
13504	Lrrc74b	-4.35	25	4.12	11	0.95	
13505	Fbxo2	-4.39	24	6.41	7	1.46	
13506	Cybb	-4.41	33	2.79	13	0.63	
13507	Nudt16l1	-4.43	25	15.19	10	3.43	
13508	Gins1	-4.46	26	3.36	33	0.75	
13509	Rac3	-4.46	11	6.29	5	1.41	
13510	Zfp605	-4.46	10	1.12	5	0.25	
13511	Kbtbd6_1	-4.46	0	2.46	0	0.55	
13512	Slc16a12	-4.46	10	1.08	4	0.24	
13513	Tmem178a	-4.46	14	2.17	12	0.49	
13514	Srgap3	-4.57	62	2.64	24	0.58	
13515	Gsta1	-4.58	110	22.18	35	4.84	
13516	Sfrp4	-4.65	89	6.86	34	1.47	
13517	AC117925.4	-4.68	0	4.71	0	1.01	
13518	Dcp2_3	-4.68	0	1.95	0	0.42	
13519	Tas1r1	-4.68	23	0.89	13	0.19	
13520	U1_40	-4.68	6	15.36	2	3.28	
13521	Grasp	-4.68	6	1.23	3	0.26	
13522	Lsm2	-4.68	4	2.68	2	0.57	
13523	Mrpl53_1	-4.68	0	7.04	0	1.5	
13524	Plaur	-4.68	7	2.47	3	0.53	
13525	Tap2_2	-4.68	1	4.61	0	0.98	
13526	Tmem200c	-4.68	8	0.83	6	0.18	
13527	AABR07064724.1	-4.74	1	176.51	0	37.22	
13528	Zdhhc12	-4.78	17	8.18	7	1.71	
13529	Gpx3	-4.86	43	9.87	15	2.03	
13530	Acsm5	-4.9	23	1.1	11	0.22	
13531	Ift27	-4.9	27	7.8	17	1.59	
13532	Scube1	-4.9	21	0.94	4	0.19	
13533	Stox1	-4.9	23	1.2	13	0.25	
13534	Clstn3	-4.9	23	2.02	7	0.41	
13535	Lrrc56	-4.9	7	1.87	5	0.38	
13536	Pappa	-4.95	174	7.79	66	1.57	
13537	Gstt3	-4.97	31	5.27	10	1.06	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13538	RGD1306091	-5.02	26	1.82	10	0.36	
13539	AABR07072440.1	-5.08	1	23.64	0	4.65	
13540	Rplp1_2	-5.13	9	24.21	2	4.72	
13541	Dcxr	-5.35	8	2.54	4	0.47	
13542	Dlg2	-5.35	22	0.57	32	0.11	
13543	Gns_1	-5.35	0	0.76	0	0.14	
13544	LOC100911286	-5.35	0	1.54	0	0.29	
13545	P2ry4	-5.35	7	2.46	2	0.46	
13546	RT1-T24-3	-5.35	10	0.91	15	0.17	
13547	Slc16a3	-5.35	8	0.68	8	0.13	
13548	SNORD45_3	-5.35	4	18.1	1	3.38	
13549	5_8S_rRNA_5	-5.35	1	9.47	0	1.77	
13550	AABR07021910.1	-5.35	1	0.62	0	0.12	
13551	AABR07027511.1	-5.35	0	0.95	0	0.18	
13552	AABR07032751.1	-5.35	18	5.96	5	1.11	
13553	AABR07069599.1	-5.35	23	13.09	4	2.45	
13554	Aox2	-5.35	27	0.66	25	0.12	
13555	Ap5z1	-5.35	13	5.94	3	1.11	
13556	Cfap46_2	-5.35	4	0.44	1	0.08	
13557	Cox4i2	-5.35	4	1.37	2	0.26	
13558	Cyp4f4	-5.35	12	1.31	6	0.24	
13559	Dnajb13	-5.35	7	0.64	9	0.12	
13560	Dyx1c1	-5.35	8	0.73	6	0.14	
13561	Gfra1	-5.35	9	0.49	5	0.09	
13562	Kcnc4	-5.35	13	0.51	5	0.1	
13563	Kcnn2	-5.35	8	0.82	4	0.15	
13564	Lilrb3	-5.35	8	0.55	5	0.1	
13565	LOC100361240	-5.35	3	5.75	1	1.07	
13566	LOC680161	-5.35	0	1.81	0	0.34	
13567	Maf	-5.35	4	0.74	1	0.14	
13568	Matk	-5.35	6	0.89	2	0.17	
13569	Plac1_1	-5.35	2	1.37	1	0.26	
13570	Prss53	-5.35	13	0.73	4	0.14	
13571	RGD1309779	-5.35	1	2.34	0	0.44	
13572	RGD1564074	-5.35	22	2.22	9	0.41	
13573	RGD1566189	-5.35	2	5.25	0	0.98	
13574	Rn60_X_0634.2	-5.35	3	1.1	1	0.21	
13575	Rorc	-5.35	3	0.97	0	0.18	
13576	Scara5	-5.35	13	0.76	6	0.14	
13577	Slc12a5	-5.35	12	0.42	3	0.08	
13578	Slc6a7	-5.35	37	2.18	10	0.41	
13579	Spint1	-5.35	3	0.6	1	0.11	
13580	Spint3	-5.35	8	5.49	10	1.03	
13581	Tbata	-5.35	10	1.26	3	0.23	
13582	AABR07004397.2	-5.35	4	3.06	1	0.57	
13583	AABR07036452.1	-5.35	6	1.45	3	0.27	
13584	Colca2	-5.35	7	2.01	4	0.38	
13585	Gpm6b	-5.35	6	0.64	3	0.12	
13586	SCARNA17	-5.35	4	10.27	1	1.92	
13587	Tor4a	-5.62	22	2.53	6	0.45	
13588	Dhh	-5.64	62	8.62	18	1.53	
13589	Brms1_2	-5.68	0	8.34	0	1.47	
13590	5_8S_rRNA_1	-5.73	14	18470.2	2	3223.5	
13591	Grin2d	-5.8	18	0.9	14	0.15	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13592	Timm8b	-5.89	8	16.42	3	2.79	
13593	AABR07000156.1	-6.02	6	3.15	2	0.52	
13594	LOC100909750	-6.02	7	3.79	3	0.63	
13595	Bsn	-6.02	12	0.2	6	0.03	
13596	Dpp6	-6.02	20	0.73	18	0.12	
13597	Loxl3	-6.02	12	1.02	2	0.17	
13598	Nhej1	-6.02	19	2.31	15	0.38	
13599	Oit3	-6.02	9	1.43	3	0.24	
13600	RGD1309821	-6.15	24	3.57	6	0.58	
13601	Slc16a14	-6.24	14	0.95	3	0.15	
13602	Gstt1	-6.35	20	7.26	5	1.14	
13603	Cyp19a1	-6.37	278	27.7	58	4.35	
13604	Acsbg1	-6.46	193	19.93	49	3.09	
13605	Ankrd54	-6.52	39	6.41	8	0.98	
13606	Lrrc4b	-6.54	45	5.9	10	0.9	
13607	AABR07043276.1	-6.69	1	3.45	0	0.52	
13608	AC135400.1	-6.69	5	6.49	1	0.97	
13609	Adamts12	-6.69	5	0.49	2	0.07	
13610	Cyp4f1	-6.69	6	0.81	1	0.12	
13611	Fsip1	-6.69	11	1.09	5	0.16	
13612	G0s2	-6.69	5	2.48	1	0.37	
13613	LOC100911393_2	-6.69	0	4	0	0.6	
13614	LOC685431_1	-6.69	2	1.05	0	0.16	
13615	Pard6a	-6.69	12	1.52	3	0.23	
13616	Slc35g2	-6.69	9	1.16	5	0.17	
13617	Slc5a2	-6.69	3	0.76	2	0.11	
13618	Zpbp2	-6.69	17	1.22	9	0.18	
13619	AABR07014855.1	-6.69	4	2.8	1	0.42	
13620	AABR07031184.1	-6.69	1	5.2	0	0.78	
13621	AABR07062344.2	-6.69	6	4.3	0	0.64	
13622	LOC691921	-6.69	20	4.83	10	0.72	
13623	RGD1563956	-6.69	1	3.21	1	0.48	
13624	Ropn1l	-6.69	5	1.75	1	0.26	
13625	Scn1b	-6.69	14	2.22	3	0.33	
13626	Slc15a3	-6.69	6	0.8	3	0.12	
13627	Tgfb3l	-6.69	8	2.02	8	0.3	
13628	Trpc2	-6.69	16	0.86	19	0.13	
13629	Hsd11b2	-7.02	22	4.08	5	0.58	
13630	Nptx2	-7.19	338	60.22	62	8.38	
13631	Slc25a43	-7.22	53	4.49	19	0.62	
13632	Baiap3	-7.36	11	0.71	3	0.1	
13633	Fam161b	-8.03	6	1.23	3	0.15	
13634	Fmod	-8.03	7	0.61	3	0.08	
13635	LOC100363048	-8.03	3	9.05	1	1.13	
13636	Arhgap25	-8.03	12	0.64	7	0.08	
13637	Cdh1	-8.03	7	0.49	2	0.06	
13638	Cenpa	-8.03	5	0.86	4	0.11	
13639	Chrne	-8.03	8	1.22	4	0.15	
13640	Chst1	-8.03	50	7.36	8	0.92	
13641	Degs2	-8.03	9	1.69	2	0.21	
13642	Fgf22	-8.03	24	4.44	33	0.55	
13643	Ftl1l1	-8.03	1	3.94	0	0.49	
13644	Lrrc27	-8.03	11	0.87	4	0.11	
13645	Mgarp	-8.03	7	1.8	2	0.22	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13646	Myom3	-8.03	7	0.5	4	0.06	
13647	Nlrc5	-8.03	7	0.38	3	0.05	
13648	Rpl10l	-8.03	6	3.38	1	0.42	
13649	Tbxa2r	-8.03	6	1.15	1	0.14	
13650	Tmem184a	-8.03	14	2.09	4	0.26	
13651	Tmem88	-8.03	5	1.39	1	0.17	
13652	Tp63	-8.03	14	0.39	7	0.05	
13653	Trpm8	-8.03	9	0.52	2	0.07	
13654	Ttyh2	-8.03	27	3.17	6	0.39	
13655	AABR07026311.1	-8.29	10	13.94	1	1.68	
13656	AC126148.3	-8.47	0	4.38	0	0.52	
13657	Slc2a3	-9.2	52	5.05	24	0.55	
13658	7SK_368	-9.36	3	7.5	0	0.8	
13659	AY172581.17	-9.36	7	42.24	1	4.51	
13660	Hist1h2bo	-9.36	37	2.45	13	0.26	
13661	Lppr5	-9.36	17	0.9	5	0.1	
13662	Sfrp1	-9.36	7	0.65	3	0.07	
13663	AABR07030911.1	-9.36	0	5.59	0	0.6	
13664	Cradd	-9.36	15	3.2	18	0.34	
13665	Cubn	-9.36	11	0.22	7	0.02	
13666	ENSRNOG0000005	-9.36	7	8.12	1	0.87	
13667	Sema3f	-9.36	7	0.42	2	0.04	
13668	Socs1	-9.36	7	2.23	1	0.24	
13669	Tmem25	-10.25	24	3.28	4	0.32	
13670	Nppc	-10.55	41	25.2	7	2.39	
13671	Fam221a	-10.7	20	1.93	12	0.18	
13672	Hist1h4b_3	-10.7	8	9.28	1	0.87	
13673	Atf1	-12.04	17	1.22	12	0.1	
13674	Lrrc24	-12.04	14	1.62	5	0.13	
13675	Slc12a3	-12.04	9	0.75	2	0.06	
13676	Hmg1l1_1	-13.38	3	2.87	0	0.21	
13677	SNORD83_2	-13.38	0	45.83	0	3.43	
13678	Tmem44	-13.38	14	1.8	4	0.13	
13679	Mt1_2	-13.82	10	32.25	2	2.33	
13680	P2rx6	-14.71	19	1.74	4	0.12	
13681	Atp8b3	-14.71	16	0.91	1	0.06	
13682	Tnfsf13b	-14.71	15	1.85	6	0.13	
13683	RGD1565368	-15.58	36	160.1	2	10.28	
13684	AABR07011951.1	-18.06	24	66.83	1	3.7	
13685	AY172581.20	-34.78	16	136.43	0	3.92	
13686	AABR07001519.1	-∞	22	0.71	31	0	Genes not used for Pathway Studio analysis
13687	AABR07002068.1	-∞	824	0.09	1226	0	
13688	AABR07003001.2	-∞	804	1.12	974	0	
13689	AABR07043564.1	-∞	24	0.25	32	0	
13690	Cngb3	-∞	20	0.12	22	0	
13691	Cntnap5a	-∞	2569	0.09	3029	0	
13692	Fstl5	-∞	24	0.1	18	0	
13693	Gpc6	-∞	47	0.31	50	0	
13694	Grid2	-∞	24	0.18	21	0	
13695	Lace1	-∞	42	2.94	50	0	
13696	Mctp1	-∞	24	0.16	36	0	
13697	Megf11	-∞	26	0.21	20	0	

Supplemental Table 3  
 FSH + Ad-E versus FSH + Ad-FOXO1(A3), 24 hours

	A	B	C	D	E	F	G
13698	Myo7b	$-\infty$	292	0.11	832	0	
13699	Nos1	$-\infty$	210	0.11	262	0	
13700	Nup210l	$-\infty$	20	0.06	18	0	
13701	Ptpst	$-\infty$	23	0.1	15	0	
13702	Rn60_X_0640.3	$-\infty$	26	0.45	32	0	
13703	Rtp2	$-\infty$	72	0.39	75	0	
13704	Smlr1	$-\infty$	49	0.64	44	0	
13705	Tepp	$-\infty$	23	1.15	22	0	
13706	Zbtb7c	$-\infty$	22	0.45	18	0	