

Supplementary Table 1

Number	Gene	Accession#	Cell Count	Average Nuclear Size	P-dAkt Intensity in control cells	P-dAkt Intensity in dPTEN KD cells
1	DIAP1	CG12284	6	0.850	571	11184
2	Hippo	CG11228	51	1.048	149	9429
3	String	CG1395	126	1.179	116	17004
4	---	CG4733	140	0.986	197	13437
5	dpS6	CG10944	145	0.887	75	15892
6	Hoip	CG3949	149	0.995	110	8961
7	Stearoyl CoA Desaturase	CG5887	150	0.907	286	5420
8	Cyclin A	CG5940	150	1.239	131	11254
9	Pp1-96A	CG6593	166	0.963	403	18983
10	Pvr	CG8222	170	0.968	223	15193
11	Pp1-13C	CG9156	186	0.898	307	16844
12	Inr	CG18402	188	0.984	164	20485
13	Pp1-87B	CG5650	191	0.857	359	16794
14	puckered	CG7850	191	1.049	90	17606
15	PPV	CG12217	191	0.925	256	4813
16	Fatty Acid Synthetase	CG3523	206	0.948	120	11141
17	---	CG14543	213	0.962	293	15856
18	flw	CG2096	215	0.910	351	14767
19	---	CG11451	229	0.974	73	22612
20	Acetyl CoA Carboxylase	CG11198	231	0.990	196	9962
21	rad50	CG6339	241	1.009	784	21118
22	Hsp83	CG1242	242	0.959	117	14525
23	---	CG1542	242	1.001	191	14377
24	---	CG10648	245	0.946	85	19173
25	I(1)G0334	CG7010	245	0.987	513	18172
26	---	CG9006	246	0.953	98	17371
27	---	CG3983	246	0.964	236	15316
28	Pp2B-14D	CG9842	246	0.911	282	16082
29	Microtubule star	CG7109	249	0.910	334	6571
30	EGFR	CG10079	249	0.933	231	21176
31	Arc42	CG4703	250	0.982	584	25874
32	---	CG14210	251	0.967	258	17073
33	B4	CG9239	253	0.976	215	20710
34	EP2237	CG4427	253	0.984	260	20609
35	Pp2A-29B	CG13383	254	0.935	233	9628
36	I(2)08717	CG15095	258	0.959	129	21481
37	bys	CG1430	260	1.002	114	21643
38	Rheb	CG1081	260	0.999	201	23023
39	CanA-14F	CG9819	261	0.956	203	18160
40	MKP-Like	CG7378	262	0.987	360	21004
41	Nopp140	CG7421	262	0.991	530	16527
42	aka CG33092	CG6770	263	1.017	126	16030
43	Ddr	CG11573	264	1.021	2187	22669
44	bgcn	CG30170	264	1.015	62	16054
45	slimfast	CG11128	265	1.009	129	14794
46	Tie	CG7525	265	1.005	377	20721
47	Pp4-19C	CG32505	265	1.073	318	19821
48	---	CG4733	266	0.997	230	16653
49	MKP-Like	CG10089	266	0.954	116	24400
50	aka CG32486	CG16745	266	0.986	262	15673
51	---	CG6638	268	1.066	165	22043
52	Ret	CG14396	268	1.072	115	11852
53	---	CG9799	268	0.934	448	12933
54	---	CG32982	269	0.995	632	17380
55	Zwischenferment	CG12529	269	0.974	95	18934
56	kurz	CG3228	270	0.970	202	14157
57	---	CG11876	271	0.992	155	19059
58	---	CG7882	271	0.979	165	23308
59	Raptor	CG4320	271	0.958	366	50476
60	Nnp-1	CG12396	272	1.047	487	11498

61	PP2C-like	CG10376	272	0.895	112	20334
62	PP2C-like	CG17598	274	0.983	87	20163
63	---	CG5432	274	0.932	159	21122
64	---	CG15507	275	0.978	279	20572
65	---	CG33093	275	1.025	242	19362
66	---	CG9882	275	0.989	110	15295
67	---	CG5059	275	0.987	259	17396
68	stathmin	CG31641	275	0.993	937	15947
69	---	CG5958	276	1.013	84	17727
70	---	CG12885	276	1.013	159	15357
71	ash2	CG6677	277	1.008	104	18136
72	Rrp45	CG9606	278	1.015	368	19937
73	---	CG11920	278	1.041	173	18720
74	Abl	CG4032	278	0.985	105	11809
75	---	CG9961	278	0.994	136	21210
76	GDH	CG5320	279	1.022	82	16640
77	Peter Pan	CG5786	279	0.981	100	15736
78	---	CG10407	279	1.029	291	13839
79	PPT-2	CG4851	280	1.080	137	18617
80	---	CG13994	280	0.989	411	14882
81	Rrp46	CG4043	280	0.990	241	15445
82	---	CG11267	281	1.016	194	18104
83	---	CG32486	282	0.986	379	17198
84	Pka-C1	CG4379	282	0.991	265	11204
85	---	CG7839	283	0.966	207	16165
86	MKP-like	CG14211	283	1.008	274	11443
87	Gadph2	CG8893	283	1.027	197	23601
88	RhoGEF4	CG8606	283	0.992	195	18346
89	---	CG16721	283	0.993	213	15947
90	---	CG8789	284	0.979	203	9591
91	tweety	CG4965	285	0.988	230	19662
92	gcl	CG8411	285	0.992	275	16933
93	---	CG17734	285	0.969	194	16684
94	---	CG3071	285	1.001	258	25932
95	fibropellin	CG31665	285	0.990	195	29624
96	---	CG11076	286	0.957	102	18795
97	Nnp-1	CG12396	286	1.024	319	15303
98	I(3)07882	CG5824	286	0.983	204	15091
99	I(1)G0020	CG1994	286	0.979	304	18719
100	---	CG4291	286	0.975	731	19715
101	---	CG17374	286	1.021	188	26315
102	Tal	CG2827	286	0.959	109	22915
103	---	CG33123	286	1.005	198	15410
104	---	CG10805	287	0.928	335	22609
105	---	CG2791	287	1.048	125	12601
106	Pkc98E	CG1954	287	0.974	113	21726
107	---	CG2611	287	0.964	205	12779
108	---	CG7845	287	1.022	130	22163
109	---	CG8199	288	1.026	132	15520
110	---	CG3838	288	1.026	74	17922
111	Nop60B	CG3333	288	0.982	121	16474
112	mio	CG7074	288	0.978	158	17265
113	---	CG5589	288	1.007	227	17149
114	Pgk	CG3127	289	0.955	252	15735
115	Hsc70Cb	CG6603	289	1.020	270	8963
116	Hexokinase A	CG3001	290	0.960	300	15931
117	Glut1	CG1086	290	1.033	204	22211
118	I(1)2Eb	CG3228	290	1.016	325	29026
119	I(2)4524	CG3267	290	1.005	149	12840
120	Sirt7	CG11305	291	0.963	164	16399
121	pit	CG6375	291	0.982	763	8366
122	---	CG3831	291	1.023	1061	23046
123	---	CG10220	292	0.995	202	17262
124	NHP2	CG5258	292	1.002	148	18730

125	---	CG7797	292	1.011	145	15522
126	---	CG7993	292	0.998	115	15142
127	ergic53	CG6831	293	0.986	183	16277
128	CPTI	CG12891	293	0.996	133	26596
129	nemy	CG8772	293	0.985	480	16288
130	sage	CG12952	293	0.994	374	17059
131	---	CG12301	294	1.019	131	14948
132	---	CG16812	294	1.015	258	14911
133	---	CG9611	295	1.006	182	17937
134	Pp4-19C	CG1459	295	1.002	190	13029
135	Marf	CG3869	295	1.009	230	13272
136	---	CG10137	295	1.060	277	15942
137	---	CG9362	295	0.981	1304	16270
138	---	CG13189	296	1.007	181	15253
139	PP2C-like	CG7115	296	0.987	237	35409
140	---	CG7430	296	0.998	104	14443
141	---	CG4554	297	1.039	409	16638
142	---	CG4434	297	1.017	57	17615
143	---	CG32486	297	1.012	296	17505
144	Mnb	CG7826	298	1.018	128	13484
145	ORF2	CG6712	299	0.983	126	18048
146	Pr2	CG3969	299	0.991	96	14330
147	Cyp310a1	CG10391	299	1.027	306	14232
148	---	CG7461	299	0.941	192	19549
149	Ror	CG4926	299	1.000	76	13951
150	Fps85D	CG8874	300	0.977	147	11196
151	mu2	CG1960	300	1.028	57	19358
152	Enolase	CG17654	300	0.958	165	14933
153	---	CG13095	300	1.004	251	10728
154	---	CG14183	300	1.012	184	21708
155	Glut3	CG3853	301	1.010	158	18070
156	park	CG10523	301	1.067	147	11554
157	Pi3K59F	CG5373	301	1.010	246	16889
158	---	CG11837	301	1.019	368	16744
159	inaC	CG6518	301	1.008	93	14475
160	---	CG16965	302	0.999	631	19292
161	Dnt	CG17559	302	0.967	424	16709
162	---	CG7516	302	1.025	189	15708
163	PP2Cb	CG1906	303	0.975	53	15828
164	---	CG32343	303	1.001	105	9110
165	---	CG8678	303	0.999	123	13443
166	Otk	CG8967	303	0.996	243	13897
167	ref(2)P	CG10360	303	0.957	138	13561
168	slingshot	CG6238	303	0.976	792	18458
169	---	CG1621	304	1.032	305	12506
170	Btk29a	CG8049	304	0.981	98	14792
171	Akt	CG4006	304	1.016	708	5028
172	---	CG32982	304	1.003	61	13429
173	---	CG6745	304	0.963	82	14691
174	---	CG13096	304	0.953	215	26408
175	Stam	CG6521	304	0.954	261	25230
176	---	CG10907	305	1.014	322	18131
177	---	CG8816	305	1.031	119	12977
178	Drl-2	CG3915	305	0.986	148	16065
179	sut1	CG8714	305	1.006	157	16822
180	---	CG11563	305	1.010	273	20578
181	Ski6	CG15481	306	0.989	322	18618
182	---	CG13339	306	1.011	382	18665
183	---	CG8778	306	0.965	217	19632
184	Akt	CG4006	306	0.977	116	14995
185	---	CG6563	307	1.008	153	17727
186	---	CG13204	307	0.991	555	18360
187	Gbl	CG3004	307	0.927	106	16139
188	PP2C-like	CG12169	307	1.039	153	19769

189	Eph	CG1511	307	0.989	326	14541
190	Ack	CG14992	307	1.011	160	13866
191	Acp70A	CG17673	307	1.010	260	20251
192	slgA	CG1417	307	1.000	278	16122
193	PyK	CG7070	308	0.906	78	14663
194	---	CG6421	308	1.044	155	17286
195	bonsai	CG4207	308	1.006	254	16122
196	---	CG7083	308	0.987	62	18860
197	Dbp73D	CG9680	308	1.009	368	17730
198	GFAT2	CG1345	308	1.009	169	14762
199	PP2C-like	CG10493	308	0.969	217	21800
200	DRONC	CG8091	309	0.982	112	17215
201	---	CG12785	309	0.998	306	17321
202	---	CG12499	309	1.006	169	12894
203	RpI135	CG4033	310	0.995	257	20622
204	v(2)k05816	CG3524	310	1.025	605	16556
205	aPKC	CG10261	310	0.980	414	15846
206	---	CG10685	311	0.994	159	13530
207	DRICE	CG7788	312	0.996	250	16871
208	---	CG6330	312	0.997	119	14612
209	---	CG11504	312	1.056	852	14195
210	---	CG10743	312	1.040	343	17309
211	GLUT1 Fam 4	CG1380	312	0.994	70	16031
212	Impl3	CG10160	312	0.976	93	13058
213	Sas10	CG4202	312	1.053	431	26180
214	---	CG13197	313	1.015	183	21868
215	SNF1A	CG3051	313	0.977	241	27167
216	---	CG5033	313	1.024	548	19091
217	PP2C-like	CG17746	313	0.986	91	26211
218	---	CG2118	314	0.981	120	15768
219	---	CG9003	314	1.019	209	14909
220	rdgC	CG6571	314	1.029	170	20595
221	---	CG6459	315	0.983	246	16386
222	Gadph1	CG12055	315	1.006	192	15535
223	nudC	CG9710	315	1.011	603	19940
224	---	CG18619	315	0.992	132	17426
225	---	CG8939	315	1.023	686	19538
226	---	CG6903	316	1.030	152	15792
227	---	CG1600	316	1.061	2144	21017
228	---	CG1516	316	0.984	186	19737
229	Cad96Ca	CG10239	316	1.060	161	16829
230	Fatp	CG7400	316	1.004	608	17228
231	---	CG13204	316	1.006	166	18927
232	Hsc70Cb	CG6603	317	1.044	530	12723
233	MKP-like	CG10371	317	0.982	107	17205
234	scylla	CG7590	317	1.025	405	14691
235	Ppy-55A	CG10930	317	0.980	288	17972
236	---	CG11125	317	1.011	218	19268
237	Sev	CG18085	318	1.026	93	18299
238	---	CG11255	318	1.040	79	12620
239	mRpL22	CG4742	318	1.026	306	12566
240	---	CG9300	318	0.987	426	24229
241	Pkc53E	CG6622	318	1.004	138	15616
242	Twf	CG3172	318	1.031	149	15030
243	---	CG6543	319	0.983	383	14843
244	PyDH	CG7010	320	1.020	130	15601
245	mRpI32	CG12220	320	1.016	288	27537
246	Aldolase	CG6058	320	0.998	255	32854
247	---	CG10627	321	1.000	94	23658
248	Htl	CG7223	321	1.031	172	17625
249	Paip2	CG12358	321	0.961	219	22954
250	---	CG8693	322	1.015	206	20922
251	---	CG4860	322	0.954	231	19637
252	Doa	CG1658	322	1.106	248	13604

253	---	CG1673	322	0.965	230	15147
254	---	CG17977	322	1.020	191	19202
255	S6K	CG10539	323	0.927	283	45400
256	Sox100B	CG15552	323	0.983	408	25167
257	Cyp4g1	CG3972	323	0.991	335	14034
258	Myotubularin	CG9115	323	0.994	93	20503
259	PyK Fam 5	CG11249	324	1.004	152	19700
260	---	CG16965	324	1.027	390	20249
261	---	CG31640	324	1.002	56	14910
262	H11	I(3)84Ff	324	0.993	339	18050
263	PRL-1	CG4993	324	0.978	555	21908
264	GADPH2 Family	CG9010	325	0.967	151	17596
265	PyK fam 3	CG7069	325	0.960	109	20690
266	Drl	CG10758	325	1.017	1233	18165
267	---	CG6724	325	0.977	203	10108
268	---	CG10399	325	1.007	188	17289
269	Tudor-SN	CG7008	325	1.019	581	17480
270	---	CG1120	326	0.985	262	16823
271	impL3 fam 5	CG10749	326	1.046	262	16546
272	---	CG11604	326	1.018	398	18483
273	neb	CG10718	326	1.014	209	18045
274	PEPCK	CG17725	327	1.039	403	20927
275	---	CG4786	327	1.008	441	14605
276	Rtnl12	CG12792	327	0.973	282	17042
277	rgr	CG8643	327	0.991	71	11802
278	Csk	CG17309	327	0.963	65	16828
279	Bem46	CG18642	328	1.033	149	24026
280	---	CG8690	328	1.046	91	17985
281	PP2C-like	CG6036	329	0.990	298	12316
282	---	CG5789	329	0.984	240	15503
283	Shark	CG18247	330	0.998	444	20963
284	---	CG6745	331	1.049	162	17003
285	Alk	CG8250	331	1.047	377	19427
286	---	CG17985	331	0.963	245	20435
287	H2O	---	331	1.069	99	17472
288	Aats-leu	CG7479	332	1.039	117	16008
289	PyK Fam 2	CG2964	332	0.985	124	12428
290	---	CG11347	332	0.981	216	12494
291	---	CG8569	333	1.029	187	21112
292	Zw	CG7140	333	0.972	196	21707
293	PP2C-like	CG12151	333	0.934	37	25850
294	Surf6	CG4510	333	1.010	394	22143
295	widerborst	CG5643	333	0.962	104	11272
296	blot	CG3897	335	0.990	103	18042
297	Nrk	CG4007	335	0.977	83	16850
298	---	CG8002	335	1.020	212	6089
299	Src42a	CG7873	336	1.056	51	13364
300	---	CG4866	336	1.015	262	16461
301	GFP	control	336	1.000	106	15938
302	Ptp99A	CG2005	337	1.011	370	16206
303	Fak56d	CG10023	337	1.022	212	13098
304	twins	CG6235	338	0.856	102	17636
305	---	CG11125	338	0.952	81	16333
306	---	CG10990	338	1.034	274	16138
307	Pfk	CG4001	338	0.986	163	24531
308	---	CG6878	339	0.993	215	20991
309	Rab7	CG5915	339	0.993	241	15101
310	---	CG12785	339	1.028	293	14316
311	GFAT1	CG12449	339	1.034	286	20970
312	TK1	CG3277	340	0.999	83	18816
313	---	CG18178	340	1.022	256	13378
314	Sirt4	CG3187	340	1.042	571	18190
315	---	CG11887	340	0.962	151	16567
316	---	CG3632	340	1.007	111	16669

317	---	CG3530	340	0.965	201	17372
318	Pgi	CG8251	341	1.025	53	17497
319	---	CG7339	341	0.995	509	17100
320	Src64b	CG7524	341	1.027	963	17502
321	CDC14	CG7134	342	0.998	183	16163
322	PP2C-like	CG2984	342	0.885	62	16544
323	Hexokinase	CG5443	342	0.959	213	18817
324	PP2C-like	CG10417	342	0.986	431	22900
325	---	CG1381	343	0.986	207	20144
326	---	CG7362	343	1.011	140	20587
327	Pgd	CG3724	344	1.009	226	19421
328	---	CG5114	344	1.027	301	20910
329	---	CG4290	344	0.989	119	15258
330	Wee	CG4488	345	0.937	318	16662
331	---	CG7627	345	1.024	699	13536
332	---	CG12134	345	0.976	43	16091
333	ImpL3	CG10160	346	0.964	309	19029
334	PppD6	CG8822	346	0.976	270	19855
335	---	CG5261	346	1.030	197	19074
336	Hop	CG1594	346	0.954	227	16263
337	---	CG5237	347	1.030	306	16928
338	---	CG18619	347	1.040	240	19993
339	ImpL3 Family 3	CG7998	347	0.990	195	18557
340	---	CG3386	348	1.039	134	19277
341	---	CG18600	348	1.005	1131	17888
342	Bka	CG4539	349	1.026	283	16960
343	---	CG5092	350	0.981	97	20426
344	bor	CG6815	351	1.040	132	18474
345	---	CG12512	351	1.064	296	12117
346	---	CG9809	351	1.048	436	13157
347	I(1)1Bi	CG6189	352	1.010	194	16504
348	---	CG17691	353	1.016	202	15611
349	---	CG13476	353	1.070	149	17225
350	PpN58A	CG3245	354	0.925	89	32047
351	Btl	CG32134	355	1.042	153	17708
352	---	CG31852	356	0.968	249	13472
353	TSC2	CG6975	356	1.010	226	18777
354	ImpL3 Family 2	CG13334	356	1.002	301	20091
355	Hsp60	CG12101	356	1.027	654	17612
356	---	CG15484	357	0.994	190	16029
357	bab2	CG9102	357	1.053	147	14998
358	---	CG18135	358	1.028	555	18800
359	---	CG3756	358	1.052	156	16244
360	---	CG8026	358	0.988	127	17343
361	unk	CG4620	359	0.978	373	18769
362	---	CG18600	360	1.003	205	15595
363	---	CG17202	360	1.009	292	12605
364	ImpL3 Family 4	CG10748	363	1.064	202	18309
365	PP2A-B'	CG7901	363	0.963	213	13121
366	PpD5	CG10138	363	1.005	411	15269
367	---	CG7056	364	0.997	548	12876
368	---	CG15484	364	1.027	174	22493
369	---	CG2321	365	1.097	325	15499
370	Ubc-E2H	CG2257	365	1.013	262	19088
371	Mkp	CG14080	366	1.008	232	22561
372	TK18	CG10673	370	0.992	180	13160
373	---	CG1969	371	0.997	407	17238
374	PTEN	CG5671	371	1.048	16791	13951
375	stai	CG31641	371	1.026	101	18811
376	Myt1	CG10569	372	0.910	420	18916
377	PGRP-LF	CG4437	374	1.057	266	16722
378	---	CG18619	376	1.005	164	22063
379	---	CG7006	381	1.042	204	16728
380	mRNA-capping-enzyme	CG1810	383	0.992	173	12285

381	Slpr	CG2272	383	1.046	179	20725
382	PpD3	CG8402	388	0.985	68	12717
383	roe1	CG6155	388	1.024	219	19431
384	fzo	CG4568	391	1.032	582	12941