

Supplementary Table 1- Cell size and cell number in response to RNAi treatment

Drosophila S2 cells were treated with RNAi molecules targeting the indicated genes along with Tsc2 RNAi. Controls are indicated in green. RNAi molecules that were synthesized in addition to the library are indicated in green.

RNAi target	Gene name	Average cell size (fL)	Average cell number	Notes
no Tsc2		472	53568	
no Tsc2		505	35897	
no Tsc2		520	37928	
S6K ctrl		533	42980	
no Tsc2		536	40402.5	
Tor ctrl		538	47450	
no Tsc2		540	43179	
S6K ctrl		541	49530	
Tor ctrl		545.5	39157	
S6K ctrl		547	35904	
S6K ctrl		549	44486	
S6K ctrl		549	37632	
Tor ctrl		553	40250	
Tor ctrl		556	34530	
S6K ctrl		558	33726	
FBgn0021796	Tor	560	40507	
Thread	d-IAP	568	20037.5	dead in one replicate
FBgn0036060	CG14163	573	17700.5	dead in one replicate
FBgn0020386	Pdk1	582	36551.5	
FBgn0015763	licorne	588	43910.5	
Tor ctrl		600	30517.5	
S6K ctrl		604	39975	
no Tsc2		605	37069.5	
FBgn0024329	Mekk1	609	39995	
FBgn0011739	wts	620	32161.5	
FBgn0040298	Myt1	627.5	38535	
FBgn0036511	CG6498	629	37641.5	
FBgn0024222	IKKbeta	630	40124	
FBgn0013987	MAPKAP2	632.5	37711.5	
FBgn0019990	Gcn2	638	36968	
FBgn0030735	CG3632	638.5	28855.5	
FBgn0015806	S6K	642	39084.5	
FBgn0003744	trc	646.5	33273.5	
FBgn0004103	Pp1 (Su(var)3-6)	648	24658.5	
FBgn0004839	otk	651	32935.5	
GFP ctrl		651	28622.5	

FBgn0010015	Calcineruin A1	651.5	30726
FBgn0011598	Chk1	652	39098.5
FBgn0024179	wit	652.5	35189
FBgn0037491	psk	653.5	29744.5
FBgn0052703	Erk7	655	36243.5
FBgn0038534		658.5	35735.5
FBgn0033441		659.5	32771
FBgn0003091		660	35005
FBgn0002938		661	33642
FBgn0010389		661.5	38966
FBgn0003731		661.5	33009
Tsc2 alone		663	28439
FBgn0003165		664	41134
FBgn0003124		664	22705
FBgn0029970		664.5	29342
FBgn0003371		666	28146
FBgn0011817		668.5	36742.5
FBgn0041203		668.5	34755.5
FBgn0003733		668.5	29269.5
FBgn0017558		669	32203
FBgn0020930		671	41657
FBgn0030834		671	35453.5
FBgn0010197		671	29649
FBgn0019686		671.5	40638
FBgn0036551		671.5	30858
FBgn0034789		672	36128
FBgn0033773		673	27760.5
FBgn0032702		677	33635
FBgn0027515		678	31758
FBgn0020391		678.5	35550
FBgn0000721		678.5	37936
FBgn0035001		679.5	34301
FBgn0028427		680	33914.5
FBgn0003366		680	32344.5
FBgn0023081		680.5	34872
FBgn0023508		681	26757
FBgn0025802		681	35039
FBgn0020440		682	34140
FBgn0037164		682.5	32823.5
FBgn0038206		683.5	35842
FBgn0051140		683.5	34483.5
FBgn0040505		684.5	35458
FBgn0028633		684.5	32925

FBgn0036896	684.5	32326
FBgn0032677	685	35806
FBgn0038736	685	33985.5
FBgn0038902	685.5	41073.5
FBgn0000274	685.5	34356.5
FBgn0013988	687	36822.5
FBgn0031784	687	42961
FBgn0036448	688.5	30158
FBgn0037925	689	36496
FBgn0035142	689	34471.5
FBgn0023083	689	33121.5
FBgn0051183	689	31782.5
FBgn0036544	689.5	30532.5
Scar	689.5	31155
FBgn0031696	691	33852
FBgn0003317	691.5	28561
FBgn0044826	692	35115
FBgn0039083	692.5	37602
FBgn0039796	692.5	33693
FBgn0011253	693.5	35282.5
FBgn0051107	693.5	30876
FBgn0045980	694	32312.5
FBgn0035143	694	32407
FBgn0028497	694.5	30551
FBgn0010715	695	35995.5
FBgn0003716	695	30761.5
FBgn0005592	695.5	35129
FBgn0004864	696	45149.5
FBgn0003217	696.5	35978
FBgn0025625	696.5	33157
FBgn0036273	698	24924.5
FBgn0039742	698	28822.5
FBgn0026323	699	34861.5
FBgn0037163	699	33267
FBgn0037167	699	24002.5
FBgn0052944	699.5	31742.5
FBgn0013759	700	39505
FBgn0003132	700	29024.5
FBgn0016672	700	32672
FBgn0034691	700.5	33474.5
FBgn0014073	701	29771
FBgn0005779	701	30401
FBgn0037327	701.5	28921.5

FBgn0004368	701.5	28427
FBgn0034179	702	33962
FBgn0036801	702	31616.5
FBgn0013984	702.5	33392
Tsc2 alone	702.5	29754
FBgn0020622	703	35706
FBgn0027889	703	32522.5
FBgn0024326	703.5	26509.5
FBgn0013983	704	38787.5
FBgn0022800	704.5	40154
FBgn0034376	705	33217.5
FBgn0035001	705	32388.5
FBgn0000229	705.5	39699.5
FBgn0052743	706	34767.5
FBgn0037218	706	34977
FBgn0040335	706.5	39276
FBgn0004834	706.5	37259
GFP	706.5	34279
FBgn0032749	706.5	31669.5
FBgn0037093	707	24104
FBgn0000723	707	34378.5
FBgn0034085	707	34910.5
FBgn0004370	707.5	29338
FBgn0015772	708	30297
FBgn0003432	708	28860
FBgn0003501	708	30718
FBgn0015295	708.5	34612
FBgn0024290	708.5	26505
FBgn0019949	709	27417
FBgn0026371	709	27806
FBgn0022768	709	26282.5
FBgn0001624	709.5	39674.5
FBgn0004462	709.5	37544.5
FBgn0016696	709.5	32826.5
FBgn0010303	709.5	30475
FBgn0046706	709.5	28693
FBgn0039692	709.5	29990
FBgn0030387	709.5	22731
FBgn0052484	710	44092
FBgn0037166	710	26144.5
FBgn0015277	710.5	34319.5
FBgn0026181	710.5	25340.5
FBgn0031855	711	36840.5

FBgn0000273	711	30795.5
FBgn0015300	712	37600.5
FBgn0027504	712	31016.5
FBgn0011737	712	28661
FBgn0031463	712	29749
FBgn0003093	712.5	35624.5
FBgn0036742	713	32015
FBgn0034295	713	34285
FBgn0040499	713	26962
FBgn0037063	713	32392.5
FBgn0036212	713.5	25744.5
FBgn0032885	714	35481
FBgn0027101	715	28553
FBgn0031299	715	27912
FBgn0000711	715	33542.5
FBgn0035133	715	29713.5
FBgn0037804	715.5	28691.5
FBgn0001079	715.5	35140.5
FBgn0035039	715.5	31460
FBgn0030697	715.5	31102.5
FBgn0002673	715.5	36381.5
FBgn0032820	716	29351
FBgn0004784	716.5	33003.5
FBgn0010407	716.5	30194.5
FBgn0004833	716.5	31148
FBgn0037064	716.5	33516.5
FBgn0034421	717	30625.5
FBgn0020412	717.5	26948.5
FBgn0028741	718	32788
FBgn0051187	718.5	33280
FBgn0032363	719	32364
FBgn0030018	719	34887
FBgn0037663	719.5	38654
FBgn0037165	719.5	30505.5
FBgn0000536	720	35941.5
FBgn0014006	720	32552.5
FBgn0033915	720	26574.5
FBgn0051711	720.5	35450
FBgn0036550	721	30885
FBgn0026063	721.5	35447.5
FBgn0030761	721.5	26027.5
FBgn0036553	721.5	28062
Tsc2 alone	722	

FBgn0014001	722	32445.5
FBgn0032632	722	30510
FBgn0025702	723	32867
FBgn0011826	723.5	33183.5
FBgn0025742	723.5	27716
FBgn0033021	724	30764
FBgn0000480	725	38494
FBgn0000489	725	31616.5
FBgn0013762	725.5	35919
FBgn0002413	725.5	33976
FBgn0032999	726	36154
FBgn0022131	726	34237.5
FBgn0015278	726.5	34112.5
FBgn0000259	727	32502
FBgn0051878	727.5	31802
FBgn0031044	727.5	27461.5
FBgn0040056	728	28005
FBgn0031265	728.5	37386
FBgn0028360	728.5	40108
FBgn0016930	728.5	30756
FBgn0024245	728.5	32080
FBgn0031294	728.5	31145
gfp	729	27523
gfp	729	33545
FBgn0035425	729	31017
FBgn0034950	729.5	29090.5
FBgn0036552	729.5	31466.5
FBgn0000147	730	33801
FBgn0005666	730.5	32541.5
FBgn0032650	730.5	39056.5
FBgn0025743	730.5	26831
FBgn0037679	730.5	30040
FBgn0010909	731.5	25110.5
FBgn0031795	731.5	32039
FBgn0000258	731.5	29503.5
FBgn0027506	731.5	29826.5
FBgn0039698	731.5	34795.5
FBgn0010379	732	29131
FBgn0031441	732	34187.5
FBgn0003139	732	25955
FBgn0036844	732	29598
FBgn0039908	733	37214
FBgn0028410	733.5	32307.5

FBgn0034950	733.5	31387
FBgn0025573	733.5	30315
FBgn0030300	734	32561
FBgn0025936	734	34844
FBgn0033791	734	35114.5
FBgn0032187	734	35933
FBgn0039015	734	26764
FBgn0000442	734.5	33508.5
FBgn0005536	734.5	31531.5
FBgn0039623	735	33260
FBgn0015402	735.5	36787
FBgn0028484	735.5	30453
FBgn0028489	735.5	29957
FBgn0004367	736	26923
FBgn0004889	736	29093
FBgn0013435	736.5	32708
FBgn0037098	736.5	33160
FBgn0029949	736.5	30016.5
FBgn0036369	736.5	31344.5
FBgn0052666	737	35455
FBgn0034137	737	30420.5
FBgn0037623	737	30986.5
FBgn0003502	737.5	30370
FBgn0000464	737.5	29814.5
FBgn0004876	739.5	31472
FBgn0031194	739.5	29208
FBgn0004833	741.5	31675
FBgn0033244	741.5	27530.5
FBgn0032673	741.5	32312
FBgn0015279	742.5	34285
FBgn0035590	742.5	29012
FBgn0035228	742.5	28344
FBgn0011285	743.5	28996
FBgn0038477	743.5	29726
FBgn0030465	743.5	28614
FBgn0003134	744	28678
FBgn0029958	744	20636.5
Tsc2 alone	744.5	29972
FBgn0003138	744.5	30948.5
FBgn0005777	745	33652
FBgn0031730	745.5	33171
FBgn0011300	746	36108
Tsc2 alone	746	32106.5

FBgn0030758	746	28363.5
FBgn0034590	746.5	29869
FBgn0028341	747	31424
FBgn0028484	747.5	37613
FBgn0050021	747.5	37326.5
FBgn0029736	747.5	27963
FBgn0005778	747.5	28560
FBgn0038588	748	30669
FBgn0004366	748	28076.5
FBgn0026136	749.5	35804.5
FBgn0029157	750	26921
FBgn0036111	752	31003
FBgn0003349	752.5	30264.5
FBgn0027587	752.5	26112.5
FBgn0014007	753	26389.5
FBgn0030976	753	28448
FBgn0031294	753	28353
FBgn0004369	754	29833.5
FBgn0030864	754.5	28471.5
FBgn0038816	755	31221.5
FBgn0051187	755.5	30755.5
FBgn0003140	755.5	28857.5
FBgn0028978	756	33106.5
FBgn0045035	758.5	37119.5
FBgn0024227	759.5	31838
FBgn0015618	760.5	33582
FBgn0000382	761	31114.5
FBgn0003079	761.5	34480
FBgn0032006	761.5	29813
FBgn0031799	761.5	30728
FBgn0024352	762.5	35590
FBgn0027497	763.5	28663
Tsc2 alone	766	
GFP	766	36712.5
FBgn0003169	766.5	28065
FBgn0039421	766.5	31272
FBgn0016078	767.5	29924.5
Tsc2 alone	768	34080.5
FBgn0029891	768	31217
FBgn0030556	768	22626.5
FBgn0013955	770.5	29157.5
FBgn0003256	772	34113
Tsc2 alone	775	29513

FBgn0046322		775	18141
FBgn0037325		776	30882
FBgn0010909		778.5	30351.5
FBgn0022800		778.5	31323
Tsc2 alone		779	30349
FBgn0038167		780	33916.5
FBgn0037929		781	31870.5
gfp		788.5	26688
FBgn0031952		789	30742.5
FBgn0010441		793.5	33530.5
FBgn0011829		801	23172
FBgn0032955		803	30725.5
FBgn0039694		806	29792.5
FBgn0004373		808	27556
FBgn0030384		808.5	30175
FBgn0010269		811.5	30798
FBgn0031030		812	23564.5
FBgn0004210	puc	812	22598.5
FBgn0039111		812.5	28680.5
FBgn0000826		821	23401
FBgn0004568		822.5	28726
FBgn0026379		826.5	32767.5
FBgn0000017		827	36375
FBgn0016131	cdk4	829.5	27212
FBgn0015617	cdk7	832	33908
FBgn0033383	alicorn	843.5	28621.5
Pbl	Pbl	845	23095
FBgn0039672	PP2C	849.5	27369
FBgn0003525	stg	853.5	25840.5
FBgn0024227	ial (Aurora-like kin	873	23903.5
FBgn0004177	mts	884	15217
FBgn0036295	sti (citron-like)	915.5	29544.5
FBgn0016694	Pdp1	936	29054.5
FBgn0004107	cdc2c	941	20245.5
FBgn0004106	cdc2	941.5	8049
FBgn0004624	CaMKII	948.5	41899.5

mean size mean number
714.158177 32206.13747