

Supplementary Table 1: Data of growth cone collapse experiments with various cell signaling inhibitors with numbers observed. Data for each inhibitor is paired with the corresponding control data from the same experiments.

Inhibitor	Treatment	Number of experiments	Number of growth cones	collapsed growth cones (number)	Percent collapsed	Mean % collapsed per experiment	Standard deviation (%) per experiment
Y27632	Control	3	274	71	25.9%	29.0%	4.3%
Y27632	LPA	3	495	133	26.9%	27.7%	2.9%
None	Control	3	294	78	26.5%	26.7%	0.4%
None	LPA	3	246	131	53.2%	54.7%	1.8%
Y27632	Control	3	587	178	30.0%	32.2%	7.0%
Y27632	S1P	3	722	237	32.8%	33.3%	9.2%
None	Control	3	574	166	28.9%	32.3%	5.5%
None	S1P	3	420	218	51.9%	51.5%	2.3%
H1152	Control	3	294	88	29.9%	30.4%	5.0%
H1152	LPA	3	315	102	32.4%	32.7%	4.9%
None	Control	3	370	99	26.8%	26.9%	0.6%
None	LPA	3	293	156	53.2%	54.4%	1.7%
U-73122	Control	6	559	124	22.2%	23.4%	8.2%
U-73122	LPA	6	361	183	50.7%	54.9%	18.9%
None	Control	6	617	73	11.8%	12.2%	2.9%
None	LPA	6	295	183	62.0%	60.5%	8.4%
U-73122	Control	4	297	41	14%	14.5%	4.0%
U-73122	S1P	4	151	53	35.1%	47.8%	22.4%
None	Control	4	130	22	16.5%	16.5%	1.8%
None	S1P	4	149	77	51.7%	57.9%	15.3%
BAPTA	Control	2	177	51	28.8%	28.3%	3.0%
BAPTA	LPA	2	125	79	63.2%	62.3%	5.6%
None	Control	2	153	43	28.1%	26.7%	3.5%
None	LPA	2	142	75	52.8%	54.7%	8.1%
BAPTA	Control	4	443	161	36.3%	37.5%	4.2%
BAPTA	S1P	4	296	344	57.7%	56.9%	4.1%
None	Control	3	265	94	35.5%	31.7%	6.4%
None	S1P	3	226	99	43.8%	47.0%	8.0%

PTX	Control	6	832	132	15.9%	18.1%	8.7%
PTX	LPA	6	696	225	32.3%	32.0%	14.6%
None	Control	6	740	147	19.9%	18.7%	9.3%
None	LPA	6	530	236	44.5%	43.5%	18.7%
PTX	Control	5	632	110	17.4%	16.2%	6.5%
PTX	S1P	5	499	110	22.0%	22.0%	10.9%
None	Control	5	466	61	13.1%	13.0%	9.8%
None	S1P	5	529	170	32.1%	36.5%	13.6%
PD98059	Control	3	289	72	24.9%	25.7%	3.4%
PD98059	LPA	3	219	93	42.5%	44.7%	8.1%
None	Control	3	362	91	25.1%	25.2%	1.2%
None	LPA	3	274	134	48.9%	48.5%	5.8%
PD98059	Control	3	850	258	30.4%	32.2%	5.4%
PD98059	S1P	3	977	460	47.1%	44.8%	3.6%
None	Control	3	599	173	28.9%	29.9%	3.1%
None	S1P	3	370	193	52.2%	51.5%	2.3%
SB203580	Control	4	391	93	23.8%	22.8%	4.2%
SB203580	LPA	4	196	58	29.6%	31.9%	9.2%
None	Control	4	399	99	24.8%	24.3%	2.0%
None	LPA	4	274	134	48.9%	48.5%	5.8%
SB203580	Control	3	574	149	26.0%	27.5%	5.1%
SB203580	S1P	3	463	211	45.6%	42.5%	6.4%
None	Control	3	599	173	28.9%	29.9%	3.1%
None	S1P	3	370	193	52.2%	51.5%	2.3%