## Cowley\_FigS1

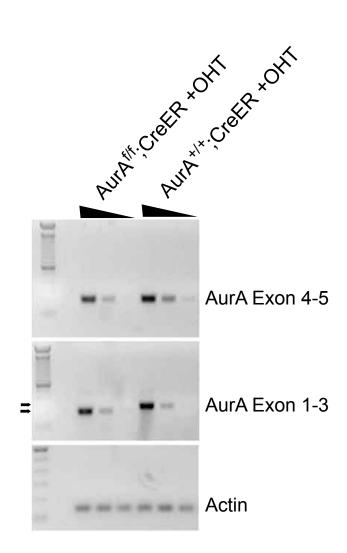


Fig. S1. RT-PCR analysis of AurA expression in MEFs. Primers amplify cDNA regions corresponding to AurA exons 4 and 5 (top), 1-3 (middle) and actin (loading control, bottom). Arrows denote smaller size of PCR product lacking exon 2 (AurAf/f;CreER +OHT sample). Black triangles indicate decreasing amounts of starting template going from left to right.

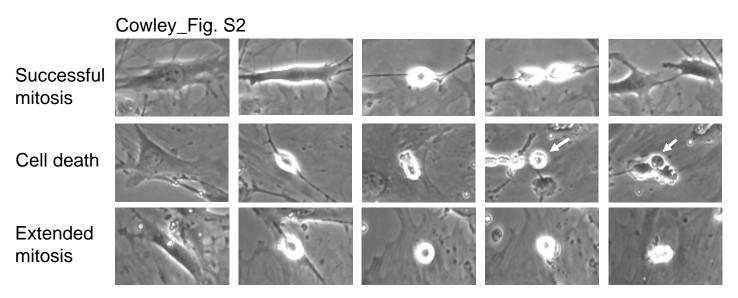


Fig. S2. Mitotic phenotypes observed in time-lapse imaging. Panels show time-lapse images of cells with each of the three phenotypes scored.

## Cowley\_Supplemental Table 1.

## Genotyping primers for AurA mutant mice.

Allele		Primer 1		Product Size	
	Name	Sequence	Name	Sequence	
AurA <sup>neo</sup>	Neo3	GCGATGCCTGCTTGCCGAATATCA	DCF2	CCACCACGAAGGCAGTGTTCAATCCTAAA	872
AurA <sup>d2</sup>	DCF5	CAGAGTCTAAGTCGAGATATCACCTGAGGGTTGA	DCE6	GATGGAAACCCTGAGCACCTGTGAAAC	273
AurA <sup>t</sup>	DCF1	CCTGTGAGTTGGAAAGGGACATGGCTG	DCF2	See above	594
AurA <sup>+</sup>	DCF1	See above	DCF2	See above	467

All reactions were performed as follows: 94°C 2', 35 cycles of 94°C 15", 58°C 30", 72°C 50", 72°C 5'.

Cowley\_Supplemental Table 2

Genotype	Cell #	Time (min)	Divided	Exited Without Dividing	Died	Did Not Exit	Genotype	Cell #	Time (min)	Divided	Exited Without Dividing	Died	Did Not Exit
+/+	1	30	X	Dividing	Died	LAIL	F/F	1	90	Divided	X	Died	LAIL
+/+	2	30	X				F/F	2	100		X		
+/+	3	30	X				F/F	3	110	Χ	,		
+/+	4	30	X				F/F	4	110	X			
+/+	5	30	X				F/F	5	110	X			
+/+	6	30	Х				F/F	6	110	X			
+/+	7	30	Х				F/F	7	110	Х			
+/+	8	30	Х				F/F	8	110		X		
+/+	9	30	Х				F/F	9	110		X		
+/+	10	30	Х				F/F	10	120		X		
+/+	11	30	Х				F/F	11	120		X		
+/+	12	30	Х				F/F	12	150		X		
+/+	13	30	Х				F/F	13	180		X		
+/+	14	40	Х				F/F	14	190		X		
+/+	15	40	Х				F/F	15	200			Х	
+/+	16	40	Х				F/F	16	200		X		
+/+	17	40	Х				F/F	17	220		Х		
+/+	18	40	Х				F/F	18	220		X		
+/+	19	40	Х				F/F	19	270		X		
+/+	20	40	Х				F/F	20	380			Х	
+/+	21	40	Х				F/F	21	400		X		
+/+	22	40	Х				F/F	22	1090			Х	
+/+	23	40	Х				F/F	23	1330			Х	
+/+	24	40	Х				F/F	24	1590				Х
+/+	25	40	Х				F/F	25	1750				Х
+/+	26	40	Х				F/F	26	1760				Х
+/+	27	40	Х				F/F	27	2060		X		
+/+	28	50	Х										
+/+	29	50	Х										
+/+	30	50	Х										
+/+	31	60	Х										
+/+	32	60	X										
+/+	33	60	Х										
+/+	34	80	X										
+/+	35	220	Х										
+/+	36	2140				X							

Fates of OHT-treated MEFs tracked through time-lapse imaging. Only cells that entered mitosis and remained in the field of view throughout the course of the imaging are included.  $+/+=AurA^{+/+}$ ;  $R26^{CreER/+}$ ;  $f/f=AurA^{f/f}$ ;  $R26^{CreER/+}$ .