**Supplementary Figure 1. Rescued cell capacitance and unaffected membrane resistance of CA1 pyramidal neurons upon early and late *in vivo* rapamycin treatment.** Normalized (Cm; **A**) and membrane resistance (Rm; **B**) of CA1 pyramidal neurons of *Tsc1-Cre⁻* (black) and *Tsc1-Cre⁺* mice (red) recorded on day 12. Cm and Rm of the rapamycin-treated mice were normalized to their own *Tsc1-Cre⁻* control littermates and all measured on day 12 post gene deletion (*Tsc1-Cre⁻* n = 16, 3 mice; *Tsc1-Cre⁺* n = 15, 3 mice; Unpaired T-test; *Tsc1-Cre⁻* n = 30, 4 mice; vs *Tsc1-Cre⁺*-Rap: n = 26, 4 mice; and *Tsc1-Cre⁺*-Rap 8: n = 26, 4 mice. One-way ANOVA, Dunnett's with *Tsc1-Cre⁻* as control). Error bars indicate SEM. * $P<0.05$.
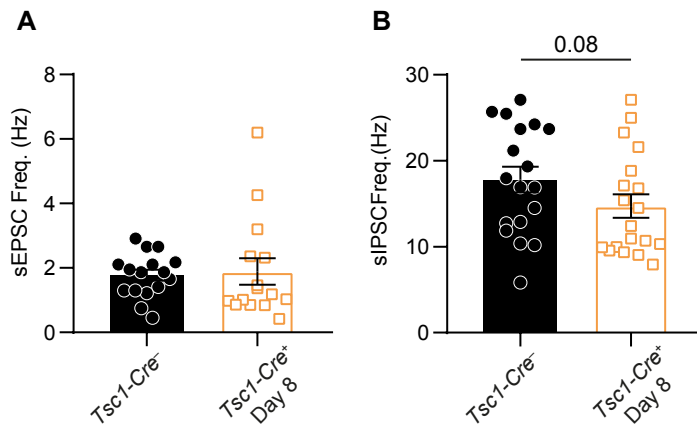

Supplementary Figure 2. Action potential dependent spontaneous excitatory and inhibitory post synaptic currents on day 8 after gene deletion. (**A**) Frequency of spontaneous excitatory post synaptic currents (sEPSC) and (**B**) spontaneous inhibitory post synaptic currents (sIPSC) measured on day 8 after *Tsc1* gene deletion. sEPSC:*Tsc1-Cre⁻* n = 16, 3 mice; *Tsc1-Cre⁺* n = 15, 3 mice; non-parametric Mann-Whitney U. sIPSC: *Tsc1-Cre⁻* n = 18, 3 mice; *Tsc1-Cre⁺* n = 19, 3 mice; non-parametric Mann-Whitney U. Error bars indicate SEM.
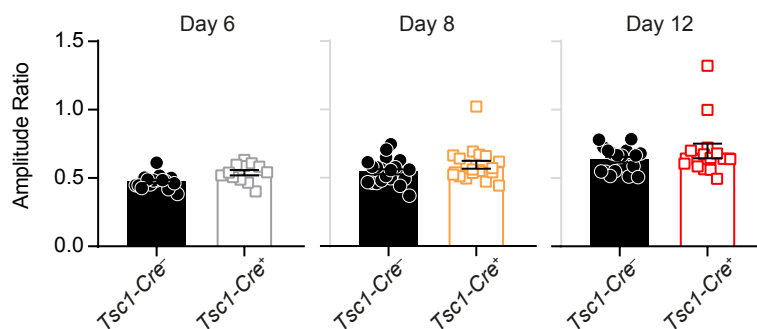
Supplementary Figure 3. Unaffected E/I amplitude ratio throughout epileptogenesis. The mEPSC/mIPSC amplitude ratio were recorded from the same cell (Day 6: *Tsc1-Cre⁻* n = 16, 3 mice; *Tsc1-Cre⁺* n = 12, 3 mice; independent T-test), day 8 (*Tsc1-Cre⁻* n = 26, 4 mice; *Tsc1-Cre⁺* n = 30, 6 mice; independent T-test) and day 12 (*Tsc1-Cre⁻* n = 17, 4 mice; *Tsc1-Cre⁺* n = 16, 3 mice; independent T-test). Error bars indicate SEM. v
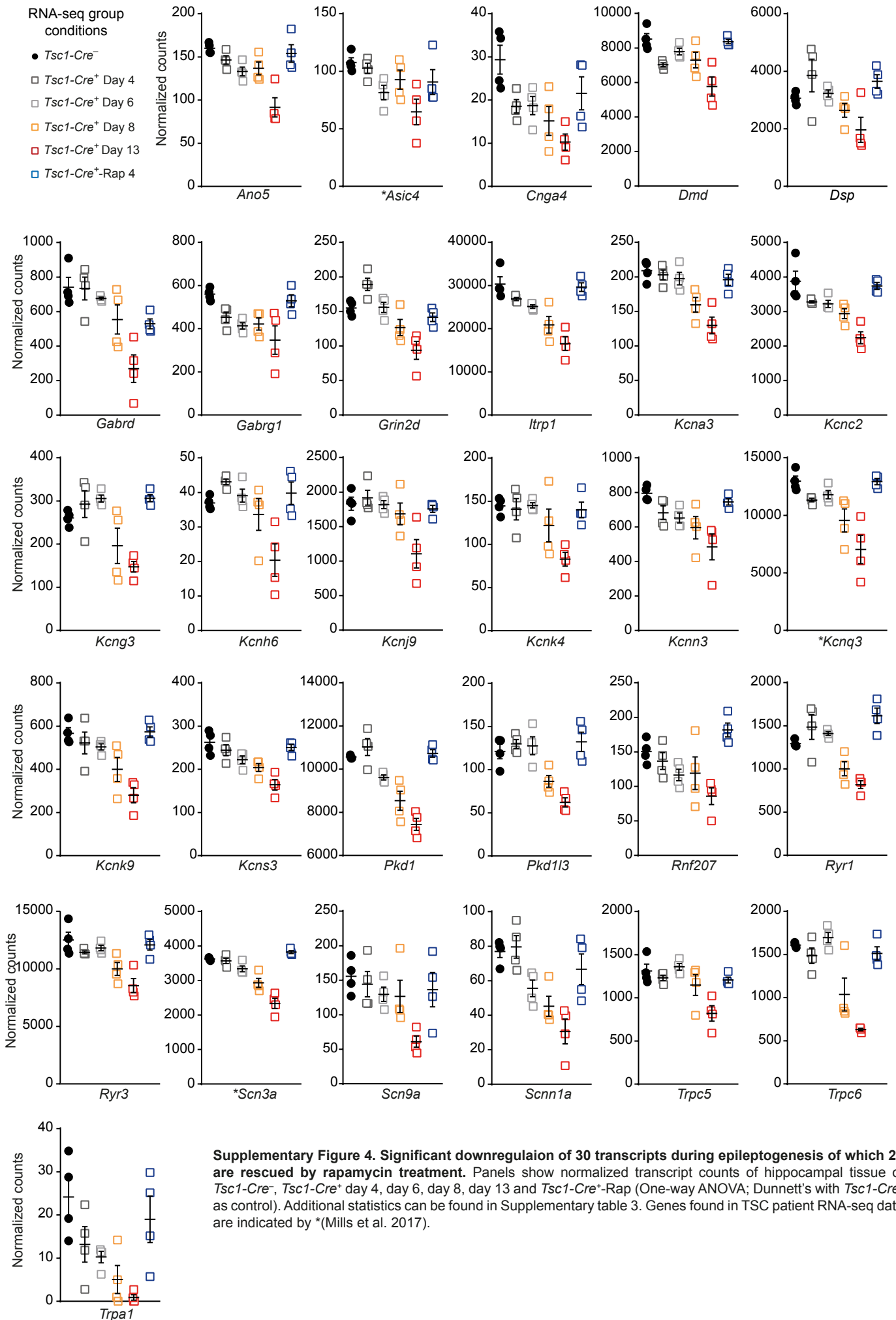
Supplementary Figure 4. Significant downregulaion of 30 transcripts during epileptogenesis of which 29 are rescued by rapamycin treatment. Panels show normalized transcript counts of hippocampal tissue of *Tsc1-Cre⁻*, *Tsc1-Cre⁺* day 4, day 6, day 8, day 13 and *Tsc1-Cre⁺*-Rap (One-way ANOVA; Dunnett's with *Tsc1-Cre⁻* as control). Additional statistics can be found in Supplementary table 3. Genes found in TSC patient RNA-seq data are indicated by *(Mills et al. 2017).
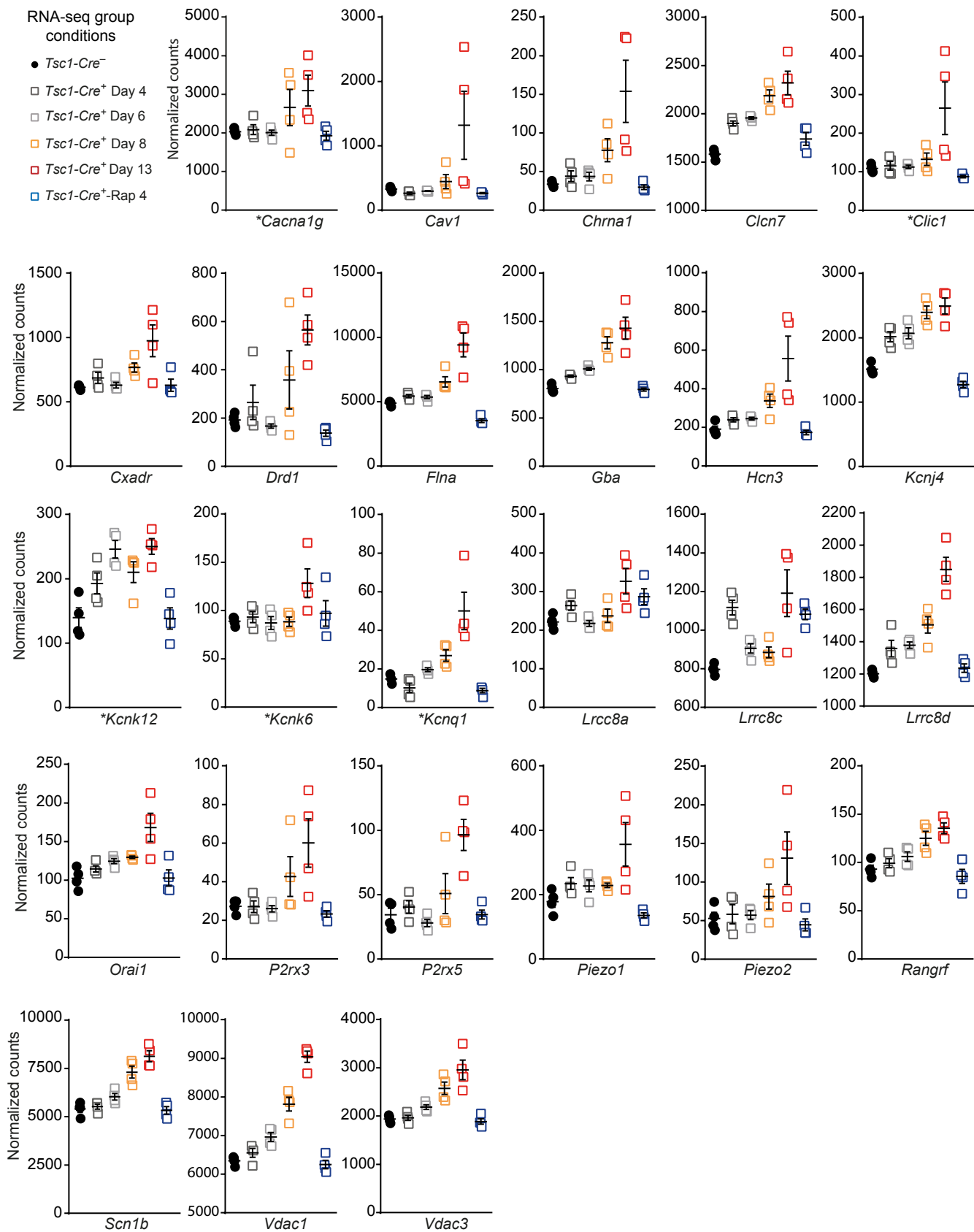
Supplementary Figure 5. Significant upregulation of 26 transcripts during epileptogenesis of which 25 are rescued by rapamycin treatment. Panels show normalized transcript counts of hippocampal tissue of *Tsc1-Cre⁻*, *Tsc1-Cre⁺* day 4, day 6, day 8, day 13 and *Tsc1-Cre⁺*-Rap (One-way ANOVA; Dunnett's with *Tsc1-Cre⁻* as control). Additional statistics can be found in Supplementary table 4. Genes found in TSC patient RNA-seq data are indicated by *(Mills et al. 2017).

Supplementary Table 1. Statistics of the passive and active membrane properties of *Tsc1-Cre⁻* and *Tsc1-Cre⁺* CA1 pyramidal neurons.

	Day 6			Day 8			Day 12		
	Tsc1-Cre⁻	*Tsc1-Cre⁺*	Statistics	*Tsc1-Cre⁻*	*Tsc1-Cre⁺*	Statistics	*Tsc1-Cre⁻*	*Tsc1-Cre⁺*	Statistics
V_{rest} (mV)	-48.29 ± 2.73	-52.06 ± 2.27	T (28) = 0.97; P = 0.34	-47.13 ± 2.48	-51.1 ± 2.045	T(34) = 1.24; P = 0.22	-50.06 ± 1.85	-48.77 ± 1.87	T(27) = 0.42; P = 0.68
Cm (pF)	111.37 ± 7.13	107.2 ±4.25	T (32) = 0.73; P = 0.47	109.5 ± 5.49	110.1 ± 2.96	T(42) = 0.11; P = 0.91	113.9 ± 7.07	137.4 ± 7.17	T(41) = 2.334; P = 0.025
Rm (MΩ)	Med: 172.5	Med: 179.5	Mann-Whitney U = 118.5; P = 0.38	178.3 ± 7.62	189.9 ± 9.64	T(42) = 0.95; P = 0.35	179.5 ± 7.48	179.4 ± 9.14	T(41) = 0.0099; P = 0.99
Rheobase (pA)	91.76 ± 10.01	85.88 ± 5.36	T(32) = 0.52; P = 0.61	Med: 80	Med: 80	Mann-Whitney U = 205.5; P = 0.38	82.33 ± 4.8	97.93 ± 5.28	T(40) = 1.62; P = 0.11
Threshold (mV)	-46.31 ± 0.44	-45.96 ± 0.97	T (32) = 0.41; P = 0.68	-44.43 ± 0.92	-45.02 ± 0.80	T (40) = 0.48; P = 0.63	-45.21 ± 0.52	-45.95 ± 0.83	T (37) = 0.78; P = 0.44
Peak Amplitude 1st AP at rheobase (mV)	Med: 97.97	Med: 97.15	Mann-Whitney U = 112; P = 0.28	98.61 ± 1.70	94.74 ± 1.12	T (40) = 0.68; P = 0.51	98.13 ± 0.59	99.71 ± 1.11	T (37) = 1.3; P = 0.19
10-90 % rise time (mV/ms)	334.59 ± 9.23	341.81 ± 7.4	T (32) = 0.61; P = 0.54	389.8 ± 18.66	383.80 ± 13.41	T (40) = 0.266; P = 0.79	334.56 ± 6.8	345.43 ± 9.17	T (37) = 0.96; P = 0.34
10-90 % decay time (mV/ms)	-76.89 ± 1.7	-79.57 ± 1.73	T (32) = 1.09; P = 0.28	-66.68 ± 2.36	-70.51 ± 1.82	T (40) = 1.31; P = 0.197	-75.702 ± 1.65	-78.61 ± 1.61	T (37) = 1.25; P = 0.22
Half-width (ms)	1.08 ± 0.017	1.08 ± 0.013	T (32) = 0.12; P = 0.90	1.27 ± 0.04	1.243± 0.02	T (40) = 0.92; P = 0.36	1.11 ± 0.023	1.18 ± 0.025	T (37) = 2.31; P = 0.026
Ih (%)	6.68 ± 0.28	5.88 ± 0.4	T (32) = 1.58; P = 0.122	6.10 ± 0.32	6.29 ± 0.31	T (37) = 0.39; P = 0.69	6.58 ± 0.34	7.41 ± 0.51	T (37) = 1.37; P = 0.18
Latency (ms)	22.61 ± 4.52	33.36 ± 3.21	T(32) = 1.97; P = 0.06	51.31 ± 3.93	55.86 ± 3.06	T(40) = 0.93; P = 0.36	30.86 ± 4.05	34.09 ± 3.98	T(37) = 0.563; P = 0.58

Supplementary Table 2. Statistics of mEPSC and mIPSC kinetics of CA1 pyramidal neurons.

		Day 6			Day 8			Day 12		
		$Tsc1\text{-}Cre^{-}$	$Tsc1\text{-}Cre^{+}$	Statistics	$Tsc1\text{-}Cre^{-}$	$Tsc1\text{-}Cre^{+}$	Statistics	$Tsc1\text{-}Cre^{-}$	$Tsc1\text{-}Cre^{+}$	Statistics
mEPSC properties	Frequency (Hz)	0.75 ± 0.077	0.6 ± 0.096	T(39) = 0.21 P = .22	0.51 ± 0.052	0.82 ± 0.14	T(54) = 1.89 P =0 .06	0.56 ± 0.053	0.46 ± 0.054	T(34) =1.30 P = 0.20
	Amplitude (pA)	-9.65 ± 0.25	-9.67 ± 0.29	T(34) = 0.07; P = 0.94	-11.21 ± 0.27	-11.06 ± 0.43	T(36) = 0.29; P = .78	Med: -9.15	Med: -8.36	Mann-Whitney U = 84.0; P =0 .0047
	Rise time (10-90% ms)	Med: 1.46	Med: 1.67	Mann-Whitney U = 88.0; P = 0.025	1.61 ± 0.41	1.79 ± 0.58	T(36) = 1.15; P = 0.25	1.66 ± 0.09	1.78 ± 0.08	T(36) = 1.02; P = 0.32
	Decay time constant (10-90% ms)	6.79 ± 0.34	6.95 ± 1.25	T(34) = 0.346; P = 0.74	7.51 ± 0.23	7.6 ± 0.34	T(36) = 0.20; P = 0.84	7.98 ± 0.33	6.71 ± 0.26	T(36) = 2.91; P = 0.0061
mIPSC properties	Frequency (Hz)	5.69 ± 0.45	5.88 ± 0.46	T(26) = 0.77 P = 0.77	5.47 ± 0.40	4.82 ± 0.29	T(44) = 1.35 P = 0.18	4.52 ± 0.34	2.31 ± 0.31	T(29) = 4.72 P = 0.0001
	Amplitude (pA)	20.42 ± 0.58	19.06 ± 0.68	T(25) = 1.53; P = 0.14	19.45 ± 0.58	18.57 ± 0.58	T(33) = 1.06; P = 0.29	15.27 ± 0.39	13.16 ± 0.38	T(31) = 3.82; P = 0.0006
	Rise time (10-90% ms)	0.55 ± 0.024	0.61 ± 0.028	T(25) = 1.78; P = 0.09	0.58 ± 0.03	0.66 ± 0.03	T(33) = 1.79; P = 0.082	0.53 ± 0.02	0.75 ± 0.04	T (31) = 4.98; P = 0.0001
	Decay time constant (10-90% ms)	11.85 ± 1.25	12.91 ± 1.31	T(25) = 0.57; P = 0.57	14.08 ± 1.171	16.39 ± 1.3	T(33) = 1.29; P = 0.2	13.57 ± 1.23	13.15 ± 1.28	T (31) = 0.23; P = 0.81

Supplementary Table 3. Detailed statistics of downregulated DE 'action potential' genes overtime.

	GeneID	Gene	One-way ANOVA (Dunnet's post hoc)	*Tsc1-Cre⁻* Mean	SEM	*Tsc1-Cre⁺*-Day 4 Mean	SEM	Sig	*Tsc1-Cre⁺*-Day 6 Mean	SEM	Sig	*Tsc1-Cre⁺*-Day 8 Mean	SEM	Sig	*Tsc1-Cre⁺*-Day 13 Mean	SEM	Sig	*Tsc1-Cre⁺*-Rap 4 Mean	SEM	Sig
1	ENSMUSG 00000055489	Ano5	$F(5, 18) = 10.65$ P < 0.0001	160.10	2.98	146.62	4.76	0.59	133.26	5.12	0.07	136.86	7.33	0.14	91.61	11.07	0.0001	154.04	10.14	0.96
2	ENSMUSG 00000033007	*Asic4	$F(5, 18) = 3.68$ P = 0.0180	107.67	4.09	102.61	4.40	0.98	81.50	6.25	0.12	92.63	8.37	0.56	64.68	11.18	0.0059	90.64	10.86	0.45
3	ENSMUSG 00000030897	Cnga4	$F(5, 18) = 5.21$ P = 0.0039	29.38	3.33	18.56	1.55	0.054	18.74	2.11	0.059	15.18	3.35	0.0091	10.28	1.87	0.0006	21.58	3.82	0.22
4	ENSMUSG 00000045103	Dmd	$F(5, 18) = 8.99$ P = 0.0002	8514.04	321.34	7027.31	195.35	0.02	7792.36	195.68	0.44	7295.8	453.93	0.07	5763.88	556.28	0.0001	8362.87	125.34	0.99
5	ENSMUSG 00000054889	Dsp	$F(5, 18) = 4.41$ P = 0.008	3063.25	101.93	3855.32	564.98	0.33	3227.30	123.76	0.99	2640.59	242.46	0.82	1963.39	434.10	0.1	3646.74	236.32	0.6
6	ENSMUSG 00000029054	Gabrd (GABAδ)	$F(5, 18) = 8.63$ P = 0.0003	741.48	57.51	733.67	66.17	0.99	675.78	7.62	0.90	554.32	84.23	0.15	269.23	80.07	0.0002	529.08	28.23	0.08
7	ENSMUSG 00000001260	Gabrg1 (GABAγ1)	$F(5, 18) = 5.42$ P = 0.003	559.91	13.86	453.22	23.78	0.13	413.22	14.84	0.027	421.94	27.96	0.039	347.15	65.67	0.0014	529.34	28.18	0.94
8	ENSMUSG 00000002771	Grin2d (NMDA2D)	$F(5, 18) = 12.17$ P < 0.0001	155.13	5.17	189.14	9.00	0.06	155.92	7.43	0.99	126.71	11.62	0.15	93.69	13.04	0.0008	141.65	6.22	0.75
9	ENSMUSG 00000030102	Itpr1	$F(5, 18) = 16.19$ P < 0.0001	30329.09	1696.68	26877.54	374.44	0.26	25134.55	419.17	0.04	20907.05	1935.79	0.0004	16556.27	1593.88	0.0001	29643.23	1002.85	0.99
10	ENSMUSG 00000047959	Kcna3 (Kv1.3)	$F(5, 18) = 11.38$ P < 0.0001	208.86	7.28	203.02	6.97	0.98	197.49	8.96	0.84	159.65	10.73	0.0006	129.67	12.12	0.0001	195.86	8.11	0.77
11	ENSMUSG 00000035681	Kcnc2 (Kv3.2)	$F(5, 18) = 13.63$ P < 0.0001	3879.38	287.63	3276.40	31.48	0.061	3222.38	105.52	0.038	2935.95	143.54	0.002	2239.89	169.99	0.0001	3739.73	98.43	0.96
12	ENSMUSG 00000045053	Kcng3 (Kv6.3)	$F(5, 18) = 8.62$ P = 0.0003	260.73	8.51	292.83	31.10	0.76	305.60	8.17	0.49	196.21	41.01	0.19	147.60	12.38	0.009	306.39	8.03	0.48
13	ENSMUSG 00000001901	Kcnh6 (Kv11.2)	$F(5, 18) = 6.63$ P = 0.001	36.98	0.94	43.09	0.84	0.51	39.09	1.89	0.98	33.62	4.58	0.9	20.38	4.68	0.006	39.77	3.23	0.95
14	ENSMUSG 00000038026	Kcnj9 (Kir3.3)	$F(5, 18) = 5.56$ P = 0.0029	1831.54	96.41	1917.66	107.19	0.98	1817.90	57.07	0.99	1685.28	157.04	0.87	1105.95	205.97	0.002	1756.87	50.24	0.99
15	ENSMUSG 00000024957	Kcnk4 (TRAAK)	$F(5, 18) = 5.10$ P = 0.0044	144.77	4.81	140.84	12.32	0.99	145.24	3.08	0.99	121.99	19.00	0.44	82.91	8.06	0.003	139.97	9.09	0.99
16	ENSMUSG 00000036760	Kcnk9 (TASK3)	$F(5, 18) = 9.37$ P = 0.0002	567.46	25.65	522.79	50.46	0.86	504.42	14.10	0.64	400.07	55.61	0.021	280.46	35.23	0.0002	573.57	23.93	0.99
17	ENSMUSG 00000000794	Kcnn3 (SK3)	$F(5, 18) = 5.60$ P = 0.002	794.42	21.07	682.28	39.94	0.33	651.80	28.90	0.15	595.73	64.41	0.029	484.91	75.16	0.0008	745.06	17.77	0.91
18	ENSMUSG 00000056258	*Kcnq3 (Kv7.3)	$F(5, 18) = 10.70$ P < 0.0001	12972.57	431.86	11324.96	152.11	0.35	11792.91	358.06	0.64	9553.82	997.13	0.017	7042.54	1234.75	0.0001	12938.20	269.68	0.99
19	ENSMUSG 00000043673	Kcns3 (Kv9.3)	$F(5, 18) = 11.33$ P < 0.0001	262.60	13.25	244.32	12.42	0.64	222.33	9.01	0.064	204.20	9.23	0.005	164.23	12.24	0.0001	250.82	7.20	0.89
20	ENSMUSG 00000032855	Pkd1	$F(5, 18) = 25.54$ P < 0.0001	10564.87	36.74	11028.39	393.84	0.66	9615.08	115.35	0.1	8538.27	439.17	0.0003	7441.26	278.32	0.0001	10728.32	174.77	0.99
21	ENSMUSG 00000048827	Pkd1l3	$F(5, 18) = 12.31$ P < 0.0001	121.20	8.46	129.85	5.22	0.91	127.70	10.42	0.97	86.56	6.87	0.03	62.05	5.31	0.0004	132.25	11.15	0.86

#	Gene ID	Gene	Statistics																	
22	ENSMUSG 00000058498	*Rnf207	F(5, 18) = 5.92 P = 0.002	150.62	8.58	136.75	12.07	0.92	116.48	23.65	0.29	119.09	23.65	0.36	85.71	12.11	0.013	181.85	9.94	0.37
23	ENSMUSG 00000030592	Ryr1	F(5, 18) = 14.70 P < 0.0001	1293.03	19.72	1485.25	142.57	0.32	1409.94	21.38	0.74	1001.65	81.12	0.069	818.23	44.66	0.002	1616.77	89.63	0.039
24	ENSMUSG 00000057378	Ryr3	F(5, 18) = 9.72 P = 0.0001	12517.11	667.81	11432.48	121.14	0.39	11816.40	225.41	0.75	9993.19	562.78	0.007	8552.84	600.93	0.0001	12092.26	456.70	0.95
25	**ENSMUSG 00000057182**	***Scn3a* (Nav1.3 α-subunit)**	**F(5, 18) = 33.98 P < 0.0001**	**3620.85**	**19.05**	**3567.24**	**75.04**	**0.99**	**3339.37**	**85.39**	**0.17**	**2931.03**	**130.10**	**0.0003**	**2335.78**	**146.38**	**0.0001**	**3823.54**	**41.15**	**0.43**
26	ENSMUSG 00000075316	Scn9a	F(5, 18) = 3.64 P = 0.0189	155.65	12.64	144.30	18.25	0.98	129.71	10.29	0.74	126.76	23.31	0.66	61.13	8.09	0.005	136.37	24.92	0.89
27	ENSMUSG 00000030340	Scnn1a	F(5, 18) = 9.04 P = 0.0002	76.91	3.43	79.58	6.54	0.99	55.58	4.75	0.10	45.16	5.82	0.0097	30.61	7.19	0.0003	66.64	8.82	0.67
28	ENSMUSG 00000041710	Trpc5	F(5, 18) = 6.88 P = 0.0009	1311.73	78.23	1231.29	30.47	0.89	1359.62	38.23	0.98	1147.94	120.37	0.39	819.69	88.93	0.0007	1207.34	33.77	0.76
29	ENSMUSG 00000031997	Trpc6	F(5, 18) = 18.71 P < 0.0001	1609.29	12.99	1485.21	89.65	0.82	1695.72	60.83	0.94	1036.36	189.68	0.002	630.99	13.84	0.0001	1512.63	77.88	0.92
30	ENSMUSG 00000032769	Trpa1	F(5, 18) = 5.59 P = 0.0028	24.21	4.67	13.20	4.10	0.16	10.27	1.34	0.057	5.06	3.24	0.0069	0.89	0.65	0.0012	18.99	5.37	0.76

Supplementary Table 4. Detailed statistics of upregulated DE 'action potential' genes overtime.

#	GeneID	Gene	One-way ANOVA (Dunnet's post hoc)	Tsc1-Cre⁻ Mean	SEM	Tsc1-Cre⁺-Day 4 Mean	SEM	Sig	Tsc1-Cre⁺-Day 6 Mean	SEM	Sig	Tsc1-Cre⁺-Day 8 Mean	SEM	Sig	Tsc1-Cre⁺-Day 13 Mean	SEM	Sig	Tsc1-Cre⁺-Rap 4 Mean	SEM	Sig
1	ENSMUSG 00000020866	*Cacna1g	$F_{(5, 18)} = 3.21$ P = 0.0302	2032.02	40.48	2085.58	124.97	0.99	2006.47	68.51	0.99	2657.52	467.56	0.34	3095.98	397.22	0.04	1930.36	115.20	0.99
2	ENSMUSG 00000007655	Cav1	$F_{(5, 18)} = 22.63$ P = 0.02	330.3	15.64	263.4	17.38	0.99	287.5	6.22	0.99	444.7	107.8	0.99	1319	528.9	0.022	264	9.61	0.99
3	ENSMUSG 00000027107	Chrna1	$F_{(5, 18)} = 6.93$ P = 0.0009	33.61	1.68	43.98	7.02	0.99	43.65	5.56	0.99	77.71	14.86	0.32	153.87	40.30	0.0008	29.66	2.89	0.99
4	ENSMUSG 00000036636	Clcn7	$F_{(5, 18)} = 18.47$ P < 0.0001	1582.31	23.93	1900.81	25.10	0.009	1958.03	12.02	0.0025	2187.02	61.79	0.0001	2320.47	122.01	0.0001	1740.86	65.59	0.31
5	ENSMUSG 00000007041	*Clic1	$F_{(5, 18)} = 4.89$ P = 0.0053	108.76	5.01	115.62	11.44	0.99	112.41	4.46	0.99	132.55	15.82	0.96	264.65	67.93	0.006	87.56	3.04	0.98
6	ENSMUSG 00000022865	Cxadr	$F_{(5, 18)} = 5.46$ P = 0.0031	613.55	8.41	686.24	42.45	0.85	629.46	21.75	0.99	766.95	35.3	0.27	973.92	123.27	0.0019	629.2	46.95	0.99
7	ENSMUSG 00000021478	Drd1	$F_{(5, 18)} = 6.45$ P = 0.0013	192.06	13.44	265.31	71.29	0.87	166.99	8.82	0.99	358.08	120.38	0.26	565.06	62.32	0.002	137.64	12.91	0.95
8	ENSMUSG 00000031328	Flna	$F_{(5, 18)} = 22.34$ P < 0.0001	4889.15	88.28	5441.7	121.22	0.82	5361.06	124.155	0.89	6547.12	406.04	0.048	9417.26	918.61	0.0001	3532.96	150.75	0.13
9	ENSMUSG 00000028048	Gba	$F_{(5, 18)} = 22.48$ P < 0.0001	806.10	20.25	930.54	9.75	0.38	1008.1	13.6	0.06	1280.5	62.72	0.0001	1429.8	114.61	0.0001	794.27	16.68	0.99
10	ENSMUSG 00000028051	Hcn3	$F_{(5, 18)} = 8.02$ P = 0.0004	190.42	15.97	239.16	10.55	0.93	245.33	6.78	0.89	337.75	34.60	0.18	556.26	115.90	0.0003	173.14	11.16	0.99
11	ENSMUSG 00000044216	Kcnj4 (Kir2.3)	$F_{(5, 18)} = 32.54$ P < 0.0001	1511.66	42.21	2016.42	79.21	0.0022	2070.06	85.74	0.0009	2395.53	97.97	0.0001	2494.50	123.75	0.0001	1274.66	50.12	0.21
12	ENSMUSG 00000050138	*Kcnk12 (2PK channel)	$F_{(5, 18)} = 10.74$ P < 0.0001	139.50	15.23	192.84	16.21	0.08	245.89	13.53	0.0004	210.17	16.17	0.016	250.23	12.13	0.0003	138.26	16.51	0.99
13	ENSMUSG 00000046410	*Kcnk6 (TWIK2, TOSS)	$F_{(5, 18)} = 2.94$ P = 0.0409	88.98	2.23	93.27	5.64	0.99	87.18	6.60	0.99	88.54	4.81	0.99	128.26	14.89	0.02	97.15	13.16	0.95
14	ENSMUSG 00000009545	*Kcnq1 (Kv7.1)	$F_{(5, 18)} = 12.77$ P < 0.0001	14.87	1.05	10.24	2.40	0.9	19.67	0.94	0.89	26.98	2.95	0.21	50.04	9.65	0.0001	8.80	1.16	0.77
15	ENSMUSG 00000007476	Lrrc8a	$F_{(5, 18)} = 5.18$ P = 0.0041	221.02	9.07	263.56	12.18	0.38	217.43	7.50	0.99	237.11	17.28	0.96	326.72	32.88	0.0036	286.55	20.55	0.086
16	ENSMUSG 00000054720	Lrrc8c	$F_{(5, 18)} = 5.95$ P = 0.002	796.38	13.76	1117.23	37.96	0.002	905.18	24.28	0.51	884.602	27.77	0.69	1191.66	120.95	0.0004	1081.92	26.9	0.007
17	ENSMUSG 00000046079	Lrrc8d (VRACs)	$F_{(5, 18)} = 27.77$ P < 0.0001	1201.48	10.76	1357.44	51.09	0.09	1378.90	19.79	0.046	1505.41	50.89	0.0007	1849.74	75.18	0.0001	1236.02	26.52	0.97
18	ENSMUSG 00000049686	Orai1	$F_{(5, 18)} = 6.93$ P = 0.0009	102.48	6.81	114.49	3.96	0.90	124.69	3.31	0.43	129.64	1.49	0.24	168.28	18.28	0.0005	102.84	10.43	0.99
19	ENSMUSG 00000027071	P2rx3	$F_{(5, 18)} = 4.40$ P = 0.0086	27.28	1.73	27.04	3.06	0.99	26.04	1.65	0.99	42.66	10.26	0.39	60.09	12.51	0.013	23.33	1.63	0.99
20	ENSMUSG 00000005950	P2rx5	$F_{(5, 18)} = 8.37$ P = 0.0003	34.48	5.09	40.48	4.85	0.98	28.00	2.80	0.98	50.90	15.51	0.55	96.48	12.06	0.0004	34.56	3.49	0.99
21	ENSMUSG 00000014444	Piezo1	$F_{(5, 18)} = 5.79$ P = 0.0023	178.45	17.64	234.35	18.60	0.58	227.05	18.53	0.69	228.79	6.67	0.67	356.22	67.72	0.003	135.59	7.72	0.78

22	ENSMUSG 00000041482	*Piezo2*	F(5, 18) = 3.52 P = 0.0216	52.75	8.04	58.30	12.30	0.99	57.11	5.83	0.99	81.16	16.30	0.65	130.81	33.98	0.01	44.57	7.67	0.99
23	ENSMUSG 00000032892	*Rangrf*	F5, 18) = 11.04 P <0.0001	93.01	4.19	99.26	4.66	0.90	106.11	5.0	0.38	125.07	7.27	0.0044	135.36	7.26	0.0003	85.48	7.26	0.82
24	**ENSMUSG 00000019194**	***Scn1b* (Nav1.1 β-subunit)**	**F(5, 18) = 28.35 P < 0.0001**	**5403.76**	**174.34**	**5522.19**	**128.05**	**0.99**	**6030.54**	**168.23**	**0.19**	**7310.30**	**306.87**	**0.0001**	**8132.58**	**281.72**	**0.0001**	**5332.62**	**197.50**	**0.99**
25	ENSMUSG 00000020402	*Vdac1*	F(5, 18) = 74.93 P < 0.0001	6347.18	57.68	6553.16	113.92	0.67	6965.88	115.99	0.01	7814.14	177.58	0.0001	9039.30	145.04	0.0001	6249.80	106.90	0.97
26	ENSMUSG 00000008892	*Vdac3*	F(5, 18) = 16.28 P < 0.0001	1938.86	37.80	1962.13	51.54	0.99	2187.14	48.93	0.35	2575.43	128.77	0.002	2954.60	203.07	0.0001	1888.15	57.47	0.99