

Supplementary Table. Statistical analyses for each figure panel and all results.

Bold text and ****, p<0.05. Italicized text, 0.05< p<0.1. *Magnitudes of partial omega squared (for RM two-way ANOVA): 0.01 small; 0.06 medium; 0.14 large. N/A not applicable.

Dependent Measure	Figure Panel	Group/Subject Number	Mean	Statistical Test	Variables, Main Effect, Interaction ****	F Value	P value	Post hoc Test (adjustment for 2-way ANOVA, Tukey for 3-way ANOVA)	Effect size (when RM two-way ANOVA and 0.05 partial omega squared is calculated, unless 0.05 small, 0.06 medium, 0.14 large)	CI (95%)
Weights	1D	SCR-9 TRIPBz: 10	Post-surgery g 1 25.2 25.77 24.71 34.98 25.46 25.9 26.28 26.36 26.76 26.96 26.21 27.21 27.14 27.51 28.04 27.65 32.04 31.41	RM 2-way ANOVA	Time****	F (14, 238) = 130.6 F (1, 17) = 0.6704	P=0.0001 P=0.4242	N/A		
General Touchscreen Training with windows	2A	SCR-9 TRIPBz: 10	General TS training HAB IT MT M8 PI	RM 2-way ANOVA	Training Stage**** Virus Interaction	F (4, 68) = 75.03 F (1, 17) = 0.6292 F (4, 68) = 0.3333	P=0.0001 P=0.4386 P=0.8547	N/A	0.92, 77, 96	
Punish Incorrect Session Length	2B	SCR-9 TRIPBz: 10	Session length (s) Day 1 1292 1252 1349	RM 2-way ANOVA	Training Stage**** Virus Interaction	F (1, 17) = 0.08579 F (1, 17) = 0.2492 F (1, 17) = 2.1286	P=0.7731 P=0.6240 P=0.9964	N/A		
Punish Incorrect Trial Number	2C	SCR-9 TRIPBz: 10	Session length (s) Day 1 29.89 27.8	RM 2-way ANOVA	Training Stage**** Virus Interaction	F (1, 17) = 2.858 F (1, 17) = 2.335 F (1, 17) = 2.335	P=0.1092 P=0.1449 P=0.1449	N/A		
Punish Incorrect Percent Correct	2D	SCR-9 TRIPBz: 10	% correct Day 1 63.19 61.82	RM 2-way ANOVA	Training Stage**** Virus Interaction	F (1, 17) = 1.599 F (1, 17) = 3.358	P=0.2231 P=0.0844	Day 1 vs Last on both: ****p=0.0001	0.51	64, 94
LDR Train: Percent reaching criteria	3B	SCR-9 TRIPBz: 10	LD train criteria completion curve Median: 5.5 Median: 7	Log-rank (Mantel-Cox) test	N/A	N/A	p=0.5328	N/A		
LDR Train: Days to completion	3C	SCR-9 TRIPBz: 10	Days to completion 5.111 ± 0.824 7.4 ± 1.046	Unpaired T-test	N/A	N/A	p=0.1088	N/A		
LDR Train: Percent correct	3D	SCR-9 TRIPBz: 10	% correct Day 1 39.29 34.87	RM 2-way ANOVA	Day**** Virus Interaction	F (1, 17) = 10.08 F (1, 17) = 0.00067	p=0.0055 p=0.9796 p=0.1871	Day 1 vs Last day in TRIPBz: ****p=0.0075	0.19	0.00, 0.53
LDR Train: Time to 1st reversal	3E	SCR-9 TRIPBz: 10	Time to 1st reversal Day 1 1316 857.6	RM 2-way ANOVA	Day**** Virus Interaction	F (1, 17) = 1.386 F (1, 17) = 1.500 F (1, 17) = 2.382	p=0.2592 p=0.2373 p=0.1411	N/A		
LDR Train: Percent correct to 1st reversal	3F	SCR-9 TRIPBz: 10	% correct to 1st reversal Day 1 64.97 68.08	RM 2-way ANOVA	Day**** Virus Interaction	F (1, 17) = 1.571 F (1, 17) = 2.700 F (1, 17) = 0.5306	p=0.2271 p=0.1187 p=0.4762	N/A		
LDR Test: Block 1, time to 1st reversal	4C	SCR-9 TRIPBz: 10	Block 1 time to 1st reversal (sec) Large 1032 1296	RM 2-way ANOVA	Separation**** Virus Interaction	F (1, 17) = 1.084 F (1, 17) = 2.423 F (1, 17) = 0.1799	p=0.3124 p=0.1380 p=0.6768	N/A		
LDR Test: Block 1, percent correct to 1st reversal	4D	SCR-9 TRIPBz: 10	Block 1 % correct to 1st reversal Small 1460 1380	RM 2-way ANOVA	Separation**** Virus Interaction	F (1, 17) = 1.679 F (1, 17) = 0.3233 F (1, 17) = 0.8583	p=0.2123 p=0.5771 p=0.3672	N/A		
LDR Test: Block 6, time to 1st reversal	4E	SCR-9 TRIPBz: 10	Block 6 time to 1st reversal (sec) Large 1685 950.5	RM 2-way ANOVA	Separation**** Virus**** Interaction	F (1, 17) = 16.36 F (1, 17) = 15.53 F (1, 17) = 3.589	p=0.0008 p=0.0011 p=0.0753	SCR vs TRIPBz in Small separation: ****p=0.0012	0.37 0.19	0.04, 0.68 0.00, 0.53
LDR Test: Block 6, percent correct to 1st reversal	4F	SCR-9 TRIPBz: 10	Block 6 % correct to 1st reversal Small 1685 950.5	RM 2-way ANOVA	Separation**** Virus**** Interaction	F (1, 17) = 1.760 F (1, 17) = 8.939 F (1, 17) = 0.8945	p=0.2022 p=0.0082 p=0.3575	SCR vs TRIPBz in Small separation: ****p=0.0012	0.10	0.00, 0.44
LDR Test: Block 1, reversal #	4G	SCR-9 TRIPBz: 10	Block 1 reversal # Large 1.444 0.8	RM 2-way ANOVA	Separation**** Virus**** Interaction	F (1, 17) = 10.07 F (1, 17) = 1.448 F (1, 17) = 1.448	p=0.0056 p=0.2454 p=0.2453	Large Separation vs Small separation in SCR: ****p=0.0158	0.12	0.00, 0.46
LDR Test: Block 6, reversal #	4H	SCR-9 TRIPBz: 10	Block 6 reversal # Large 1.556 2.1	RM 2-way ANOVA	Separation**** Virus**** Interaction	F (1, 17) = 14.83 F (1, 17) = 5.531 F (1, 17) = 0.3419	p=0.0013 p=0.0310 p=0.5664	SCR vs TRIPBz in Small separation: ****p=0.0012	0.26 0.12	0.00, 0.59 0.00, 0.46
LDR Test: Block 1, correct image choice latency	5A	SCR-9 TRIPBz: 10	Block 1 correct image choice latency (sec) Large 9.151 3.87	RM 2-way ANOVA	Separation**** Virus**** Interaction	F (1, 17) = 2.977 F (1, 17) = 0.4937 F (1, 17) = 4.610	p=0.1026 p=0.4918 p=0.0465	SCR vs TRIPBz in Small separation: ****p=0.0012	0.08	0.00, 0.41
LDR Test: Block 6, correct image choice latency	5B	SCR-9 TRIPBz: 10	Block 6 correct image choice latency (sec) Large 13.34 3.68	RM 2-way ANOVA	Separation**** Virus**** Interaction	F (1, 17) = 0.00033 F (1, 17) = 0.8853 F (1, 17) = 0.8399	p=0.9955 p=0.3559 p=0.3722	N/A		
LDR Test: Block 1, reward collection latency	5C	SCR-9 TRIPBz: 10	Block 1 reward collection latency (sec) Large 1.376 1.217	RM 2-way ANOVA	Separation**** Virus**** Interaction	F (1, 17) = 1.144 F (1, 17) = 2.248 F (1, 17) = 1.539	p=0.2987 p=0.1521 p=0.2316	N/A		
LDR Test: Block 6, reward collection latency	5D	SCR-9 TRIPBz: 10	Block 6 reward collection latency (sec) Large 1.29 1.484	RM 2-way ANOVA	Separation**** Virus**** Interaction	F (1, 17) = 0.09015 F (1, 17) = 0.1240 F (1, 17) = 1.383	p=0.7676 p=0.7291 p=0.2559	N/A		
LDR Test: Block 1, total IT blank touches	5E	SCR-9 TRIPBz: 10	Block 1 total IT blank touches Large 12.67 10.3	RM 2-way ANOVA	Separation**** Virus**** Interaction	F (1, 17) = 3.077 F (1, 17) = 0.7417 F (1, 17) = 4.547	p=0.0974 p=0.4011 p=0.0478	SCR vs TRIPBz in Large separation: ****p=0.0012	0.05	0.00, 0.36
LDR Test: Block 6, total IT blank touches	5F	SCR-9 TRIPBz: 10	Block 6 total IT blank touches Large 13.67 16	RM 2-way ANOVA	Separation**** Virus**** Interaction	F (1, 17) = 1.877 F (1, 17) = 0.0887 F (1, 17) = 0.04460	p=0.1885 p=0.7684 p=0.8353	N/A		
EPM: Total distance traveled	6A	SCR-9 TRIPBz: 8	Total distance traveled 1406 1347	Unpaired t-test	N/A	N/A	p=0.6529	N/A		
EPM: Duration in open arms	6B	SCR-9 TRIPBz: 8	Duration in open arms 90.46 82.7	Unpaired t-test	N/A	N/A	p=0.5044	N/A		
EPM: Frequency in open arms	6C	SCR-9 TRIPBz: 8	Frequency in open arms 11.33 11.38	Unpaired t-test	N/A	N/A	p=0.9863	N/A		
Total DCX+ cells	7C	SCR-9 TRIPBz: 8	All cells 5685 6936	2-way ANOVA	Cell type**** Virus**** Interaction	F (2, 45) = 165.4 F (1, 45) = 23.58 F (2, 45) = 1.466	P=0.0001 P=0.0001 P=0.2416	SCR vs TRIPBz in Immature Cells: ****p=0.0001	0.57	0.35, 0.73
DCX+ cells (superior vs inferior)	7D	SCR-9 TRIPBz: 8	Superior 3113 3622	2-way ANOVA	Regions**** Virus**** Interaction	F (1, 30) = 6.466 F (1, 30) = 14.50 F (1, 30) = 0.0390	P=0.0164 P=0.0006 p=0.4726	SCR vs TRIPBz in superior region: ****p=0.0001 SCR vs TRIPBz in inferior region: ****p=0.0001	0.24	0.03, 0.51
DCX+ progenitor cells (superior vs inferior)	7E	SCR-9 TRIPBz: 8	Superior 1241 1430	2-way ANOVA	Regions**** Virus**** Interaction	F (1, 30) = 17.712 F (1, 30) = 10.55 F (1, 30) = 1.330	P=0.2006 P=0.0029 P=0.2579	SCR vs TRIPBz in superior region: ****p=0.0001	0.36	0.10, 0.61
DCX+ immature cells (superior vs inferior)	7F	SCR-9 TRIPBz: 8	Superior 1872 2192	2-way ANOVA	Regions**** Virus**** Interaction	F (1, 30) = 7.121 F (1, 30) = 8.813 F (1, 30) = 0.02025	P=0.0122 P=0.0058 P=0.8878	SCR vs TRIPBz in superior region: ****p=0.0001	0.31	0.07, 0.57
LDR Test: Block 6, Large separation, time to 1st reversal	Supp Fig 1E	SCR-9 TRIPBz: 10	Block 6 Large separation Time to 1st reversal (sec) SCR TRIPBz (Mo) 730.6 TRIPBz (Mo) + CA1: 10 604.8	1-way ANOVA	Treatment	F (2, 21) = 0.3079	P=0.7383	N/A		
LDR Test: Block 6, Large separation, percent correct to 1st reversal	Supp Fig 1F	SCR-9 TRIPBz: 10	Block 6 Large separation % correct to 1st reversal SCR TRIPBz (Mo) 59.29 TRIPBz (Mo) + CA1: 10 66.31	1-way ANOVA	Treatment	F (2, 21) = 0.4144	P=0.6660	N/A		
LDR Test: Block 6, Large separation, reversal number	Supp Fig 1G	SCR-9 TRIPBz: 10	Block 6 Large separation reversal # SCR TRIPBz (Mo) 1.556 TRIPBz (Mo) + CA1: 10 2.1	1-way ANOVA	Treatment	F (2, 21) = 0.6267	P=0.4512	N/A		
LDR Test: Block 6, Small separation, time to 1st reversal	Supp Fig 1H	SCR-9 TRIPBz: 10	Block 6 Small separation Time to 1st reversal (sec) SCR TRIPBz (Mo) 1685 TRIPBz (Mo) + CA1: 10 950.5	1-way ANOVA	Treatment****	F (2, 21) = 6.406	P=0.0057	SCR vs TRIPBz (Mo): ****p=0.0008	0.31	0.01, 0.58
LDR Test: Block 6, Small separation, percent correct to 1st reversal	Supp Fig 1I	SCR-9 TRIPBz: 10	Block 6 Small separation % correct to 1st reversal SCR TRIPBz (Mo) 44.03 TRIPBz (Mo) + CA1: 10 63.76	1-way ANOVA	Treatment****	F (2, 21) = 3.496	P=0.0489	SCR vs TRIPBz (Mo): ****p=0.0472	0.17	0.00, 0.45
LDR Test: Block 6, Small separation, reversal number	Supp Fig 1J	SCR-9 TRIPBz: 10	Block 6 Small separation reversal # SCR TRIPBz (Mo) 0.3333 TRIPBz (Mo) + CA1: 10 1.2	1-way ANOVA	Treatment	F (2, 21) = 2.882	P=0.0783	N/A		

Bold text and **, $p < 0.05$. Italicized text, $0.05 < p < 0.1$. *Magnitudes of partial omega-squared (for RM two-way ANOVA): 0.01 small; 0.06 medium; 0.14 large. N/A not applicable.

	Variables	Effect size (Cohen's d)
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