	IPSC Amplitude				
Figure 2c	**dCre**	**Cre**	**Cre + Nrxn3a (-SS4)**	**Cre + Nrxn3a (LNS4-LNS6)**	**Cre + Nrxn3a (LNS1-LNS4)**
	1.878397583	0.372478027	3.935572998	0.084747612	5.267785645
	5.794429199	0.794836426	3.807510986	0.194543289	1.907627197
	0.894480286	1.380685059	1.49530481	0.446087555	0.6237901
	5.245019531	5.650089844	4.662871582	0.920987366	4.714319824
		0.591476196	7.262024902	0.118982117	7.95752832
	4.927504395	0.032868874	4.601295898	0.219041168	1.520331665
	4.504977051	0.122413185	1.351060913	1.0060495	2.651093018
	1.323639771	0.288438599	7.58114502	0.724992615	0.709278564
	4.025512695	0.040847393	5.081791504	1.107179688	2.391909668
	9.749810547	0.198694687	0.528076721	0.321287048	6.24501123
	0.553428223	0.257778564		0.076472359	9.093652344
	1.923399048	0.725104797		0.502667694	3.482282471
	6.204882813	0.943583984		0.090415604	2.928464355
	4.113476074	5.684670898		4.848932129	8.100895996
	5.459125	2.19826123		0.018875826	2.741332275
Mean	4.042720158	1.285481851	4.030665533	0.712084105	4.022353511
Number (# cells)	14	15	10	15	15
Statistical Test	ANOVA with Dunnett's Multiple comparisons test				
Significance		to dCre, ** or 0.0047	ns	to dCre, *** or 0.0005	ns

	IPSC Amplitude				
Figure 2f	**dCre**	**Cre**	**Cre + Nrxn3a (-SS4)**	**Cre + Nrxn3a (LNS2/3-only)**	**Cre + Nrxn3a (LNS2-only)**
	0.785692322	0.387728516	1.122364136	5.786537109	4.743918457
	3.587024902	1.143088867	6.007285645	1.671965454	11.80621484
	9.452959961	4.14034668	1.61983728	9.397269531	4.07598877
	4.60894043	0.044391834	5.159187012	6.176229492	4.21179541
	7.380458496	0.020140263	2.636102783	1.918957275	3.855185059
	12.42824121	7.956678711	2.636219971	12.20743262	2.10840332
	1.617584229	0.181040451	10.22994629	1.535411133	6.234746094
	5.631896973	1.97139856	6.554281738	2.549123291	4.081328613
	5.50968457	0.753565491	7.999151855	3.142222656	7.790749512
	7.648881348	2.853336914	2.290608398	5.764934082	12.49784766
	7.243889648	2.134730225	3.952739502	2.064831055	5.605489746
	1.673033813	0.082260223	0.716276001	4.443207031	4.660748047
	3.737975342	0.168303391	6.779841309	5.776748535	3.65961499
	3.903456055	2.590674805	3.476205566	1.791719849	6.68042041
		0.53862561	4.490854004	8.86315918	
		0.445560425	4.730633301		
		5.383587891	12.25826758		
		1.393002686	1.725601196		
		0.598703308	6.535405273		
		0.125680862	1.734318115		
		4.091167725	0.943911194		
		0.189941406	8.049019531		
		1.30984729			
		1.825361938			
		2.967205322			
		0.407705048			
		0.494904663			
		0.279454132			
		0.317594727			
		0.238563858			
Mean	5.372122807	1.501153061	4.620366258	4.872649886	5.858032209
Number (# cells)	14	30	22	15	14
Statistical Test	ANOVA with Dunnett's Multiple comparisons test				
Significance		to dCre, *** or 0.0003	ns	ns	ns

	IPSC Amplitude				
Figure 2h	**dCre**	**Cre**	**Cre + Nrxn3a (LNS2-only, -SS2)**	**Cre + Nrxn3a (LNS2-only, +SS2a)**	**Cre + Nrxn3a (LNS2-only, +SS2ab)**
	5964.409668	4606.71	7361.821289	3639.122803	3097.981934
	4745.520508	5399.395	11019.78516	3819.175049	7974.344238
	11629.30176	6389.247	7548.390625	1165.312012	8083.233398
	5912.60791	4517.534	5775.598145	4328.794922	5331.562988
	6221.105957		6929.060059	6349.186523	6319.923828
	13302.37695	536.1362	11310.85352	499.245544	266.343872
	4464.449707	1430.944	4805.038574	8412.263672	174.491028
	4620.115723	4690.004	8723.996094	298.91629	59.955173
				1489.80542	7368.539063
				2932.223877	3609.56665
	2691.438721	174.148	2283.496094	506.367737	2053.677246
	5187.203613	308.1678	1365.148071	1636.432861	629.925537
				411.405151	1003.198242
				570.505127	2115.99707
					699.965393
Mean	6473.853052	3116.920667	6712.318763	2575.625499	3252.580377
Number (# cells)	10	9	10	14	15
Statistical Test	ANOVA with Dunnett's Multiple comparisons test				
Significance		ns, p = 0.0511	ns	**, p = 0.0078	*, p = 0.0314

Figure 3e	Gephyrin Puncta Density, Avg. Mouse			
	ΔCre	Cre	Cre + N3-L2 (SS2-)	Cre + N3-L2 (SS2ab)
	0.41575045	0.390080245	0.312931575	0.405016317
	0.47059792	0.411151178	0.442962728	0.445329132
	0.527587061	0.492753112	0.519471051	0.544329284
	0.557290105		0.55677772	0.490630199
	0.525490392		0.45413924	
Mean	0.499343186	0.431328178	0.457256463	0.471326233
Number (# animals)	5	3	5	4
Statistical Test	One-Way ANOVA with Tukey's Multiple comparisons test			
Significance	ns	ns	ns	ns

	Gephyrin Puncta Density, Pseudoreplicate			
	ΔCre	Cre	Cre + N3-L2 (SS2-)	Cre + N3-L2 (SS2ab)
	0.537651479	0.431108994	0.485791395	0.529184527
	0.510161593	0.495316717	0.529184527	0.578222293
	0.540473797	0.534829162	0.485438606	0.534123582
	0.538357058	0.464976804	0.46956307	0.5813974
	0.549293539	0.534829162	0.510486673	0.609973364
	0.578927872	0.475913284	0.472032598	0.556702122
	0.517542467	0.486144185	0.570813709	0.543296114
	0.484733026	0.478382812	0.587042035	0.55846607
	0.54788238	0.458979379	0.565521864	0.549293539
	0.540473797	0.511192253	0.548940749	0.518248046
	0.498491824	0.512956201	0.535181951	0.550351908
	0.509075515	0.479441181	0.548587959	0.506253197
	0.534476372	0.516836888	0.46921028	0.535534741
	0.532359634	0.464271225	0.484733026	0.46956307
	0.493905558	0.546118431	0.529537316	
	0.597978515		0.579986241	0.483321868
	0.551057487		0.524245471	0.591275511
	0.573636027		0.55952444	0.494582705
	0.57010813		0.577163924	0.484380237
	0.566227444		0.596567356	0.483321868
	0.537298689		0.542237745	0.445573371
	0.567285813		0.564816285	0.415586248
	0.571872078		0.5369459	0.537651479
	0.549293539		0.548940749	0.389479812
	0.484027447		0.556349332	0.520364785
	0.540826586		0.555996543	0.520011995
	0.541179376		0.541884955	0.545765642
	0.561993967		0.570813709	0.485085816
	0.570813709		0.539415427	0.480435368
	0.575752765			0.482616288
	0.55952444		0.403591399	
	0.516484098		0.500608562	
	0.516131308		0.463212856	
	0.540152011		0.396535605	
	0.556702122		0.4582738	
	0.541532166		0.439928736	
	0.520011995		0.460743328	
	0.533418003		0.422289252	
	0.546471221		0.490024872	
	0.504848298		0.455098693	
	0.509906345		0.485791395	
	0.506605987		0.519830713	
	0.50343088		0.457568221	
	0.594097829		0.454040324	
	0.498491824		0.454040324	
	0.460037748		0.404649768	
	0.410999982	0.389127022	0.198973382	0.370781958
	0.409941613	0.400769082	0.206381965	0.381365649
	0.455804272	0.398652343	0.321038613	0.397946764
	0.411705562	0.408883244	0.389127022	0.445220582
	0.406413716	0.42475878	0.376073804	0.432167363
	0.417702986	0.370429169	0.415586248	0.398153154
	0.416291828	0.416997407	0.241308144	0.409236034
	0.427933887	0.457215431	0.226490977	0.40253303
	0.427933887	0.431108994	0.244836041	0.381365649
	0.355964792	0.382071228	0.285406855	0.417350197
	0.338678097	0.328447196	0.345028311	0.404296978
	0.36901801	0.355445966	0.366548482	0.408883244
	0.468151911	0.384187966	0.357130038	0.421583673
	0.448748479	0.336561359	0.362315006	0.415939038
	0.446436653	0.366548482	0.35772874	0.388421443
	0.440281526			
	0.483321868	0.439223157	0.440634316	0.418408566
	0.45862659	0.441692685	0.470974229	0.474149336
	0.515778519	0.494963927	0.491083241	0.444867792
	0.451570796	0.474149336	0.412058351	0.448042899
	0.410647193	0.431461784	0.432520153	0.452629165
	0.470268649	0.456862641	0.419819724	0.34608668
	0.463565645	0.384187966	0.460743328	0.476971653
	0.489672082	0.356670371	0.323155351	0.455451483
	0.437811998	0.360903847	0.408177665	0.438870367
	0.474149336	0.344675522	0.455804272	0.44769011
	0.485438606	0.340442045	0.473796546	0.496375086
	0.456157062	0.419819724	0.444515002	0.454393114
	0.503783669	0.361609427	0.479088391	0.435342471
	0.51436736	0.449454058	0.499902983	
	0.443809423		0.432167363	
Mean	0.49859714	0.431786746	0.45588795	0.470957657
Number (# ROI's)	77	44	75	57
Statistical Test	One-Way ANOVA with Tukey's Multiple comparisons test			
Significance	ns	****, p < 0.0001 (to dCre) *, p = 0.0369 (to Cre + LNS2ab)	**, p = 0.0019 (to dCre)	ns

	Synaptoporin Puncta Density, Avg. Mouse			
	ΔCre	Cre	Cre + N3-L2 (SS2-)	Cre + N3-L2 (SS2ab)
	0.383518935	0.457873998	0.411570348	0.308552997
	0.410929424	0.295864549	0.389362215	0.343481464
	0.279541875	0.299965309	0.275481705	0.327842414
	0.263204624		0.364960929	0.264833474
	0.313737688		0.247342369	
Mean	0.330186509	0.351234619	0.337743513	0.311177587
Number (# animals)	5	3	5	4
Statistical Test	One-Way ANOVA with Tukey's Multiple comparisons test			
Significance		ns	ns	ns

	Synaptoporin Puncta Density, Pseudoreplicate			
	ΔCre	Cre	Cre + N3-L2 (SS2-)	Cre + N3-L2 (SS2ab)
	0.251186255	0.229313295	0.299871232	0.233546771
	0.325142023	0.32456651	0.284701275	0.328094407
	0.355612002	0.327036037	0.295637756	0.306574236
	0.274823164	0.295637756	0.22331587	0.36866522
	0.246599989	0.251539045	0.208145914	0.378543331
	0.347497839	0.229313295	0.228254926	0.428286677
	0.331975093	0.318921875	0.23531072	0.3693708
	0.297401704	0.258947628	0.182392267	0.3796017
	0.251891835	0.292462648	0.264239474	0.365490113
	0.288934752	0.258242049	0.34679226	0.269531319
	0.275528744	0.400769082	0.351025736	0.269178529
	0.206381965	0.342205994	0.338678097	0.276587113
	0.26882574	0.33550299	0.222963081	0.287876382
	0.257889259	0.348203419	0.263181105	0.328447196
	0.213437759	0.286818013	0.387715863	
	0.155227461		0.444162213	0.269178529
	0.407824875		0.454393114	0.240602565
	0.381012859		0.474854915	0.228212494
	0.237780247		0.468504701	0.251539045
	0.22331587		0.348203419	0.198973382
	0.274823164		0.343969942	0.143938191
	0.224727029		0.348556208	0.255066942
	0.249069517		0.282584537	0.210968231
	0.225432608		0.283995696	0.299518442
	0.176394842		0.305868656	0.224727029
	0.224727029		0.342205994	0.248716728
	0.246599989		0.372898696	0.333033462
	0.306927025		0.415586248	0.336208569
	0.284348486		0.22366866	0.443942121
	0.329858355			0.287876382
	0.30234076		0.20073733	
	0.285406855		0.231430033	
	0.338325307		0.243777672	
	0.316334083		0.209204283	
	0.363726165		0.225785398	
	0.460037748		0.243777672	
	0.405355347		0.190859219	
	0.341500415		0.22366866	
	0.390538181		0.228254926	
	0.259668951		0.389832601	
	0.254775257		0.34608668	
	0.215907287		0.3082214	
	0.273412005		0.206734755	
	0.305515867		0.244836041	
	0.26812016		0.244836041	
	0.238838616		0.219435184	
	0.40288582	0.490377661	0.524245471	0.305515867
	0.382424018	0.505194828	0.3796017	0.306221446
	0.452981955	0.453334744	0.41311672	0.26847295
	0.354906423	0.434284102	0.477677233	0.293873807
	0.340442045	0.476266074	0.391949339	0.282231748
	0.228607716	0.479441181	0.387363074	0.300623895
	0.295637756	0.451570796	0.375368224	0.396535605
	0.410999982	0.408530455	0.366901272	0.369723589
	0.43640084	0.427581098	0.393713288	0.287523593
	0.389832601	0.461448907	0.417702986	0.304810287
	0.360198268	0.453334744	0.445220582	0.317157926
	0.354553633	0.412764331	0.472385387	0.310807712
	0.467446332	0.484027447	0.314776928	0.33585578
	0.381718439	0.504489249	0.460390538	0.314335609
	0.435574448	0.425464359	0.353142474	0.23460514
	0.441692685			
	0.352084105	0.261417156	0.404649768	0.378896121
	0.366548482	0.339736466	0.376779383	0.372193117
	0.463212856	0.363373375	0.419466935	0.360198268
	0.416291828	0.340794835	0.35772874	0.239544196
	0.370429169	0.330563934	0.387363074	0.240249775
	0.396535605	0.408530455	0.347850629	0.188742481
	0.365842903	0.233899561	0.331622303	0.352789684
	0.497080665	0.185567374	0.218024025	0.318216295
	0.41346951	0.286465224	0.372545907	0.31257166
	0.378543331	0.256478101	0.434989681	0.348556208
	0.41311672	0.325624879	0.409941613	0.434989681
	0.400769082	0.313982819	0.349967367	0.506253197
	0.456157062	0.265650632	0.48049955	0.412058351
	0.481910709	0.230018874	0.492847189	
	0.391949339		0.456157062	
Mean	0.330665517	0.352493029	0.336175265	0.309751753
Number (# ROI's)	77	44	75	57
Statistical Test	One-Way ANOVA with Tukey's Multiple comparisons test			
Significance	ns	ns	ns	ns

	Inh. Synapse Puncta Density, Avg. Mouse			
	ΔCre	Cre	Cre + N3-L2 (SS2-)	Cre + N3-L2 (SS2ab)
	0.152955794	0.170527656	0.117548491	0.109650786
	0.185073468	0.115286629	0.191494241	0.151129673
	0.138270037	0.149206517	0.134013041	0.171808576
	0.151434443		0.09452829	0.11558629
	0.147357153		0.212354191	
Mean	0.155018179	0.145006934	0.149987651	0.137043831
Number (# animals)	5	3	5	4
Statistical Test	One-Way ANOVA with Tukey's Multiple comparisons test			
Significance	ns	ns	ns	ns

	Inh. Synapse Puncta Density, Pseudoreplicate			
	ΔCre	Cre	Cre + N3-L2 (SS2-)	Cre + N3-L2 (SS2ab)
	0.124534759	0.090314159	0.143232612	0.120301282
	0.170174556	0.173219735	0.135471239	0.168986259
	0.184861795	0.174630894	0.134765659	0.155227461
	0.139704715	0.131590552	0.098781112	0.203912438
	0.132296132	0.121359651	0.086080683	0.222257501
	0.189448061	0.119242913	0.103014588	0.22366866
	0.174630894	0.166869521	0.113598278	0.175336473
	0.161577675	0.126298707	0.091372528	0.193681537
	0.14534935	0.147113298	0.137940767	0.21273218
	0.15663862	0.130532183	0.174278104	0.135824029
	0.140057505	0.207793124	0.194739906	0.128768235
	0.092783687	0.170750207	0.173572525	0.132296132
	0.149935616	0.171808576	0.095606004	0.158049779
	0.14534935	0.152405144	0.118537334	0.174278104
	0.103014588	0.154169092	0.209204283	
	0.075849782		0.26847295	0.124181969
	0.217318446		0.255772521	0.125593128
	0.2120266		0.300929601	0.103099214
	0.130884973		0.299518442	0.115362227
	0.121006862		0.21273218	0.074438623
	0.136882398		0.202148489	0.05574077
	0.116067806		0.20109012	0.101250639
	0.131590552		0.154169092	0.087139052
	0.104778536		0.152405144	0.098075532
	0.094194846		0.159460937	0.115362227
	0.11148154		0.185567374	0.11218712
	0.125240338		0.225785398	0.16722231
	0.163341624		0.2462472	0.148524457
	0.152405144		0.108659223	0.188843696
	0.180981108			0.116773386
	0.163694414		0.076202572	
	0.138646346		0.098075532	
	0.169691838		0.101250639	
	0.155142475		0.063149354	
	0.197209434		0.079024889	
	0.221551922		0.080436048	
	0.196151065		0.073733044	
	0.170044628		0.077260941	
	0.190859219		0.096311584	
	0.119729883		0.158755358	
	0.117068519		0.130884973	
	0.091372528		0.134103346	
	0.12241802		0.080788838	
	0.160166517		0.096664374	
	0.110775961		0.096664374	
	0.098428322		0.069146778	
	0.154521882	0.186625743	0.085727893	0.113245489
	0.153463513	0.194739906	0.081141627	0.1231236
	0.188742481	0.166869521	0.107248064	0.097017163
	0.133354501	0.17921716	0.164399993	0.099133901
	0.132296132	0.193328747	0.152757933	0.095606004
	0.079024889	0.164752783	0.147818878	0.104834821
	0.115362227	0.17886437	0.084316735	0.140410294
	0.171455787	0.170397418	0.085022314	0.127357076
	0.161577675	0.186625743	0.080788838	0.092078108
	0.136176818	0.174278104	0.103720167	0.107600854
	0.129121025	0.144643771	0.127004286	0.113598278
	0.131943342	0.140952711	0.154521882	0.117831755
	0.216965656	0.171808576	0.102293529	0.118537334
	0.162636045	0.15663862	0.160519306	0.115362227
	0.192261041	0.148171667	0.125945917	0.079024889
	0.188389691			
	0.160519306	0.114656647	0.195092695	0.14534935
	0.171455787	0.152052354	0.183450636	0.180981108
	0.202501279	0.177806001	0.22402145	0.159813727
	0.19015364	0.135471239	0.159460937	0.101956219
	0.186978533	0.127004286	0.197562223	0.10054506
	0.181686687	0.176042053	0.159813727	0.051860084
	0.161224886	0.082199996	0.150641195	0.15699141
	0.255066942	0.063502143	0.083258366	0.14570214
	0.184156215	0.087844631	0.176394842	0.136529608
	0.163341624	0.088903	0.21237939	0.14534935
	0.169339049	0.10089785	0.194387116	0.22366866
	0.160872096	0.117126175	0.152052354	0.236016299
	0.195445485	0.106895274	0.275528744	0.179922739
	0.229666085	0.083611155	0.266356212	
	0.163694414		0.242013724	
Mean	0.154944853	0.145682395	0.148416639	0.135939684
Number (# ROI's)	77	44	75	57
Statistical Test	One-Way ANOVA with Tukey's Multiple comparisons test			
Significance	ns	ns	ns	ns

Sex info
Male
Female

Figure 4b	ΔCre	Cre	Cre + N3-L2 (SS2-)	Cre + N3-L2 (SS2ab)
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
Average	6.938547203	2.975921813	6.272955093	3.247186118
Count (cells)	[illegible]	[illegible]	[illegible]	[illegible]
Statistical Test		one-way ANOVA with Tukey's Multiple comparisons test		
Significance		*** 0.0004 (to ΔCre)	ns 0.8939 (to ΔCre)	** 0.0013 (to ΔCre)

Figure 4c	ΔCre	Cre	Cre + N3-L2 (SS2-)	Cre + N3-L2 (SS2ab)
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
Average	74.40771997	68.14240709	74.39690604	61.90947909
Count (cells)	[illegible]	[illegible]	[illegible]	[illegible]
Statistical Test		one-way ANOVA with Tukey's Multiple comparisons test		
Significance		ns 0.9816 (to ΔCre)	ns >0.9999 (to ΔCre)	ns 0.4603 (to ΔCre)

Figure 4e	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	cell 15	cell 16	cell 17	Average	Count
ΔCre																			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17

Cre	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	cell 15	cell 16	Average	Count
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16

Cre + N3-L2 (SS2-)	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	Average	Count
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14

Cre + N3-L2 (SS2ab)	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	cell 15	cell 16	cell 17	cell 18	cell 19	cell 20	Average	Count
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20

Figure 4e	Statistical Test	Significance
ΔCre	Two-way ANOVA with Dunnett Multiple comparisons test	
Cre		****, <0.0001 (to deltaCre)
Cre + N3-L2 (SS2-)		ns, 0.3688 (to deltaCre)
Cre + N3-L2 (SS2ab)		****, <0.0001 (to deltaCre)

Figure 4f	ΔCre	Cre	Cre + N3-L2 (SS2-)	Cre + N3-L2 (SS2ab)
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]		[illegible]
	[illegible]	[illegible]		[illegible]
	[illegible]			[illegible]
				[illegible]
				[illegible]
				[illegible]
Average	21.38535508	11.44220292	19.11623734	12.81272388
Count (cells)	17	16	14	20
Statistical Test		one-way ANOVA with Tukey's Multiple comparisons test		
Significance		** 0.0036 (to ΔCre)	ns 0.8007 (to ΔCre)	** 0.0088 (to ΔCre)

Figure 4g	rise time				decay time			
	ΔCre	Cre	Cre + N3-L2 (SS2-)	Cre + N3-L2 (SS2ab)	ΔCre	Cre	Cre + N3-L2 (SS2-)	Cre + N3-L2 (SS2ab)
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]
	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]		[illegible]
	[illegible]			[illegible]	[illegible]			[illegible]
				[illegible]				[illegible]
				[illegible]				[illegible]
				[illegible]				[illegible]
Average	1.389267833	1.304359663	1.524182754	1.403252313	16.04197648	16.13340008	16.65209416	16.41611013
Count (cells)	17	16	14	20	17	16	14	20
Statistical Test		one-way ANOVA with Tukey's Multiple comparisons test				one-way ANOVA with Tukey's Multiple comparisons test		
Significance		ns 0.9539 (to ΔCre)	ns 0.8551 (to ΔCre)	ns 0.9997 (to ΔCre)		ns 0.9997 (to ΔCre)	ns 0.9669 (to ΔCre)	ns 0.9882 (to ΔCre)

Figure 4h	ΔCre	Cre	Cre + N3-L2 (SS2-)	Cre + N3-L2 (SS2ab)
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]		[illegible]
	[illegible]	[illegible]		[illegible]
	[illegible]			[illegible]
				[illegible]
				[illegible]
				[illegible]
Average	0.198993426	0.388937634	0.218393655	0.365056757
Count (cells)	17	16	14	20
Statistical Test		one-way ANOVA with Tukey's Multiple comparisons test		
Significance		*** 0.0003 (to ΔCre)	ns 0.9733 (to ΔCre)	*** 0.0009 (to ΔCre)

Figure 4i	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	Average	Count
ΔCre																
PPR 20ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PPR 50ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PPR 100ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PPR 500ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Cre	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	Average	Count
PPR 20ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PPR 50ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PPR 100ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PPR 500ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Cre + N3-L2 (SS2-)	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	Average	Count
PPR 20ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PPR 50ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PPR 100ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PPR 500ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Cre + N3-L2 (SS2ab)	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	cell 15	cell 16	cell 17	Average	Count
PPR 20ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PPR 50ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PPR 100ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PPR 500ms	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Figure 4i	Statistical Test	Significance
Cre	Two-way ANOVA with Dunnett Multiple comparisons test	****, 0.0001 (to deltaCre)
Cre + N3-L2 (SS2-)		0.9932 (to deltaCre)
Cre + N3-L2 (SS2ab)		****, <0.0001 (to deltaCre)

Sex info
Male
Female

Figure 5d	ΔCre	Cre	Cre + N3-L2 (SS2-)
	33.08665537	20.27520154	11.68815989
	22.77766001	19.79623029	24.04925212
	16.97379736	11.40458955	17.30123684
	35.13991623	17.22425327	20.50749234
	16.86132199	11.78101486	29.05597039
	11.20778883	7.635044856	16.18437203
	29.57005031	14.18084305	22.06644975
	9.656517788	9.175799355	12.06718974
	16.51654994	5.871967708	11.03018241
	8.059706473	8.209237209	17.95375156
	11.29492573	5.328606415	9.077870398
	38.33180054	11.12854616	13.09220381
	17.26966583	26.02585235	7.943947178
	10.1939918	15.15848163	15.60338313
	18.11080274	9.348153159	18.40795737
	9.176556956	9.420838035	34.73227207
	9.896645772	19.38673301	9.620996623
	21.47950885	13.30023054	11.05057834
	13.2832697	10.08081453	25.45954394
	14.70163013	8.40908536	21.24014074
	17.33252448	17.45007784	13.76058394
	10.9260962	6.302057622	9.105588187
Average	17.81124468	12.58607538	16.86359649
Count (cells)	22	22	22
Statistical Test	one-way ANOVA with Tukey's Multiple comparisons test		
Significance		*, 0.0442 (to ΔCre)	ns, 0.9624 (to ΔCre)

Figure 5e	ΔCre	Cre	Cre + N3-L2 (SS2-)
	55.72067444	30.72271545	37.07911214
	47.53241618	29.48103353	35.58536418
	30.5562733	37.10095703	25.12172892
	51.89694763	38.51826538	42.05912964
	46.39984273	42.01057983	33.78859517
	41.56410889	30.19556217	31.140631
	33.93053813	37.88191233	25.62493591
	26.85420512	39.67763916	23.11932699
	54.60321676	17.6805364	41.00677205
	32.1289684	39.67808695	46.18389832
	35.29991699	16.85451619	40.50687876
	61.7972583	32.60593892	31.76019409
	46.35625732	39.55006958	38.14988688
	40.95822717	28.67827108	27.92633606
	50.86942769	46.00581523	30.58007874
	31.07650085	27.36680176	39.87721415
	43.50107402	25.22674744	25.28307821
	41.71091268	30.07298574	33.20721578
	31.35516073	39.8756488	34.53149028
	33.74540609	33.67227804	34.87043172
	26.68144836	26.77633565	29.4364327
	32.63278117	37.90568156	39.22144511
Average	40.78052559	33.06992628	33.91182622
Count (cells)	22	22	22
Statistical Test	one-way ANOVA with Tukey's Multiple comparisons test		
Significance		**, 0.0070 (to ΔCre)	*, 0.0185 (to ΔCre)

Figure 5g

ΔCre	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	cell 15	cell 16	Average	Count
5uA	0.00869751	0.018030556	0.025964685	0.004245924	0.013997396	0.042272949	0	0.05201392	0.264009918	0	0	0.033761162	0	0.046159225	0	0.020560129	0.033107086	16
10uA	0.504306946	1.495073608	1.153765747	0.962425415	0.088355812	2.301730713	0.448645966	2.459514404	4.767181641	0.337881226	0.79303717	0.125297035	3.77070752	0.166915894	0.027583008	2.106986572	1.344338042	16
15uA	0.798132996	3.857144531	2.598949463	3.018617432	0.515710754	3.009377686	2.89542334	3.473037598	5.259799316	4.374201172	3.996394775	1.653526489	8.020148926	2.256633057	0.036665752	4.413043457	3.136050422	16
20uA	1.431837402	4.124155273	3.231218018	3.685756104	1.111239014	3.264994873	4.189687988	4.64798584	6.137756348	4.820350586	6.031804688	1.88698938	8.90043457	4.428713867	4.205271973	4.860915527	4.184944466	16
25uA	2.095214844	5.492344727	5.936523438	4.329061035	2.147388428	2.75896875	6.119327148	4.072883789	6.771738281	4.812659668	7.87084375	1.027388184	9.477169922	3.860094971	3.620283936	6.767128906	4.822438736	16
30uA	2.468828857	6.082618164	7.338557617	5.749165527	2.774387695	2.801755615	6.102416992	3.95893335	6.880056152	5.371413574	8.399644531	3.085812744	9.71675293	3.901509521	4.044665527	6.623270508	5.331236832	16
40uA	4.413566406	5.170899902	8.593271484	7.502909668	3.964625977	2.958983154	7.117675781	4.37536377	6.497514648	4.905714844	7.943739746	3.053729492	8.476850586	4.594478516	4.358313477	6.561964844	5.655600143	16
50uA	4.935589844	7.180820801	9.481775391	7.692547363	5.073556152	3.262817871	6.137160156	4.228392578	6.683088867	4.685387207	7.74375	3.140893066	8.65812207	4.410916504	4.202091309	7.013630371	5.908158722	16

Cre	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	cell 15	cell 16	Average	Count
5uA	0.105557526	0	0.249742294	0.02846854	0	0.066156158	0.109959656	0.098388672	0	0	0.096153259	0	0	0	0	0.130205658	0.055289485	16
10uA	0.847917847	0.056711834	0.989045715	2.731400391	0.79934198	0.191226502	0.484249725	0.250015595	0.216158356	0.730644043	0.64258374	0.0625	0.140489929	0.032413738	1.746132446	2.234503174	0.759708438	16
15uA	1.076224243	1.782363892	1.088324097	3.279325684	1.342871094	1.252939575	0.829856995	0.60889148	1.284827637	2.416580078	3.529101074	1.337161377	0.325493805	0.501796753	2.054075928	2.689841553	1.587479704	16
20uA	2.968005859	1.607110596	1.574232178	3.447105469	1.601904663	2.64439502	1.286716675	1.12503418	2.81557959	4.355733398	3.932210693	1.720812622	2.861818359	0.947172058	4.035453125	4.142020508	2.566581562	16
25uA	3.617193359	1.483201294	1.589385498	3.976438232	1.276062012	3.521484619	1.470496094	1.437540649	2.439744141	4.354559082	4.207924316	1.778860229	2.768212402	1.01932782	3.297922119	6.155692871	2.774627796	16
30uA	3.664765869	1.373370972	1.794380859	3.500243164	1.161647583	2.973595215	1.889885376	1.212772461	2.364945313	4.319019531	3.026588623	1.310377808	3.73182251	1.032688354	3.275404785	6.237675781	2.679324013	16
40uA	4.250709473	1.42716626	2.24791748	3.337801758	1.569291992	3.478177734	2.210175049	1.957796509	2.259200928	4.828723633	3.17591333	1.381532349	3.316103271	1.145548462	3.325061768	6.613478516	2.907787407	16
50uA	4.15723584	1.585543091	2.336954346	3.280918945	1.958566772	3.517077881	2.298072021	1.994413696	3.096338379	6.848422363	2.104624512	1.604365479	3.418854492	1.127203369	3.965078613	6.597674805	3.118209038	16

Cre + N3-L2 (SS2-)	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	cell 15	Average	Count
5uA	0.052777325	0.139853348	0.009943782	0.004118652	0.025966099	0.113244629	0	0.982086731	0.13114827	0.16907959	0.060058594	0	0	0	0.438937714	0.141814315	15
10uA	0.732871704	2.331780273	0.203233872	0.494167023	0.511092377	1.935807251	0.933540833	3.074328613	0.658398438	1.376643311	0.166745865	0.07131723	3.548142822	0.165002899	3.173278076	1.291756706	15
15uA	1.479908447	4.405369629	1.670439331	0.731253967	3.673931152	2.305904053	1.278975464	6.762988281	3.028836914	3.068199463	1.668776245	0.297861725	4.501173828	0.133721252	4.998974121	2.667087592	15
20uA	1.9899021	7.880351074	2.420779785	1.841532959	4.745338379	2.70847583	2.612434814	10.17621289	3.494921875	2.795551025	3.257821777	4.26559668	8.701650391	1.195543091	4.975330078	4.204096183	15
25uA	2.848230713	8.473379883	4.189586914	3.112232422	5.174488281	2.478792236	3.044799805	10.00442676	5.641194824	3.092251953	4.080453613	3.753511963	9.802490234	1.001812988	4.806583496	4.766949072	15
30uA	3.281430908	8.478006836	4.272862305	3.959835449	5.006510254	2.339782715	3.021976807	9.759273438	6.369456055	3.148259277	3.789973877	4.206787109	10.19152832	1.255447998	6.743647461	5.054985254	15
40uA	3.61738916	9.325978516	8.146677246	4.493507324	5.10253418	2.002652954	2.611755371	9.606818359	6.538146973	3.405451904	3.980318604	4.062166748	9.867807617	1.591471313	4.595881348	5.263237174	15
50uA	4.655300781	9.468817383	8.013209473	4.672678223	5.572425293	2.491455078	2.945333008	11.1617666	6.118855957	3.206054688	3.999692627	5.015186523	10.17522754	1.724785645	5.886253906	5.673802848	15

Statistical Test: Two-way ANOVA with Dunnett Multiple comparisons test

Significance: Cre: ****, <0.0001 (to ΔCre); Cre + N3-L2 (SS2-): ns, 0.6555 (to ΔCre)

Figure 5h	ΔCre	Cre	Cre + N3-L2 (SS2-)
	11.68206085	9.773437148	9.983163093
	13.95954387	2.899435782	20.30585799
	22.60592812	4.312806518	20.34177967
	17.94573302	4.486203859	11.84258889
	12.18758736	3.141547713	11.7679947
	4.372985882	8.388615369	2.858218761
	15.70437448	5.084910556	6.06366142
	6.922495037	4.518664667	20.10821642
	10.22913233	6.289057219	14.48635023
	10.04903231	13.91851617	5.60751494
	18.46421884	3.811656729	9.562705737
	7.398046439	3.096298452	12.05487527
	15.20233784	8.912671561	21.40151521
	10.1950954	2.707703315	4.186287173
	11.20017553	6.907552041	8.683177929
	14.20672116	14.38784931	
Average	12.64534178	6.414807901	11.9502605
Count (cells)	16	16	15
Statistical Test	one-way ANOVA with Tukey's Multiple comparisons test		
Significance		**, 0.0026 (to ΔCre)	ns, 0.9197 (to ΔCre)

Figure 5i

rise time	ΔCre	Cre	Cre + N3-L2 (SS2-)
	1.920768023	1.322306633	1.934096575
	1.597219706	4.384708881	1.400321841
	1.35463953	2.07113	0.881232262
	1.275668502	3.742317438	1.846053004
	1.210665464	4.044305325	2.174274921
	2.540911436	3.049522161	2.121698141
	2.110756159	1.919538498	2.222308636
	2.638007879	2.251010656	1.726323366
	1.838764191	2.465481281	2.8472929
	2.107265949	2.065537214	2.625669479
	1.50511539	5.772886276	2.074166536
	3.340965986	2.854610682	2.750765085
	1.600717783	1.574673772	1.587146282
	4.41513586	3.388375759	4.499539852
	0.729940057	4.520892143	1.362264514
	2.211130142	1.425482869	
Average	2.024854504	2.928298724	2.136876893
Count (cells)	16	16	15
Statistical Test	one-way ANOVA with Tukey's Multiple comparisons test		
Significance		*, 0.0323 (to ΔCre)	ns, 0.9361 (to ΔCre)

decay time	ΔCre	Cre	Cre + N3-L2 (SS2-)
	77.30950165	40.71490097	47.63690186
	49.55550003	78.2141037	64.3864975
	58.18799973	65.771	57.29650116
	82.02749634	93.44529724	84.49199677
	92.62010193	71.98090363	47.42079926
	99.76709747	77.40070343	57.66049957
	47.28630066	31.5583992	54.37779999
	83.39089966	53.66659927	65.07489777
	49.50579834	55.51190186	73.72327423
	42.36880112	43.44979858	56.34550095
	52.31750107	109.2099991	37.2378006
	66.00050354	68.94550323	70.1835022
	50.24029922	31.82299995	42.97999954
	57.52420044	54.14020157	71.90920258
	69.58820343	129.3880005	30.12750053
	33.32820129	42.39070129	
Average	63.18865037	65.47568835	57.3901783
Count (cells)	16	16	15
Statistical Test	one-way ANOVA with Tukey's Multiple comparisons test		
Significance		ns, 0.9354 (to ΔCre)	ns, 0.6707 (to ΔCre)

Figure 5j	ΔCre	Cre	Cre + N3-L2 (SS2-)
	0.113337342	0.068451696	0.045371897
	0.138923405	0.238515657	0.024565276
	0.050349036	0.154278375	0.051207975
	0.15312625	0.135442164	0.122252264
	0.079559307	0.114925828	0.108946908
	0.094557377	0.129556867	0.15781886
	0.277126487	0.366294653	0.103197537
	0.092199881	0.485610369	0.041884933
	0.104090418	0.069876757	0.119559277
	0.080135851	0.206561537	0.075411384
	0.053088968	0.48366384	0.154039671
	0.113963948	0.467731097	0.149033647
	0.036759723	0.177826308	0.048125623
	0.131240028	0.214367571	0.214016572
	0.064644373	0.104129118	0.14229068
	0.047542857	0.069427341	
Average	0.101915328	0.217916199	0.103848167
Count (cells)	16	16	15
Statistical Test	one-way ANOVA with Tukey's Multiple comparisons test		
Significance		**, 0.0051 (to ΔCre)	ns, 0.9984 (to ΔCre)

Figure 6a	Ctrl	Dag1 gRNA
	100	39.78243606
	100	41.18925945
	100	31.15536592
Average	100	37.37568714
Count (cultures)	3	3
Statistical Test	two-tailed, one sample t test	
T-value	19.97	
df	2	
Significance	**, p = 0.0025	

Figure 6c	Ctrl	Dag1 gRNA
	1.393716675	4.538832031
	2.448588867	0.374032013
	1.557436279	0.319219849
	6.824246094	1.741697021
	3.690708008	0.605207947
	1.576948242	0.570067383
	5.698196777	2.974365234
	2.13142041	1.538900391
	4.416081543	3.182121338
	4.263709961	0.683313416
	0.848329895	2.760336914
	1.689602783	1.110234009
	8.952677734	0.441584839
Average	3.499358713	1.603070183
Count (cells)	13	13
Statistical Test	unpaired two-tailed T-test with Welch's correction	
T-value	2.439	
df	18.69	
Significance	**, p = 0.0249	

Figure 6e	dCre	dCre + Dag1 gRNA	Cre	Cre + Dag1 gRNA
	1.51827417	2.10462793	2.110289795	3.119434814
	3.787624268	0.245582733	0.366818573	4.967742188
		0.665654175	2.347228271	0.922079834
		0.498255951	1.312861328	1.540783447
		0.285121552	1.465384644	0.973251953
	5.331669922	0.73066095	8.572755859	3.184894531
	4.191088867	0.601045288	1.769262939	5.042607422
	5.69667334	0.25892804	2.786459473	1.875074219
	0.689091675	4.245503906	2.910873047	
	9.865595703		0.152849976	
	4.40634668	3.223001221	2.037180176	5.77991748
	9.017279297	2.340318848	1.687684937	4.436753906
	6.398844238	0.498766571	2.844393311	5.753077637
	5.571657715	4.732151367	6.844233398	0.699419678
	6.601068848	2.016201172	0.380742035	0.409260254
Average	5.256267894	1.603272836	2.505934517	2.977253643
Count (cells)	12	14	15	13
Statistical Test	2-way ANOVA with Tukey's multiple comparisons test	***, p = 0.0004 (to dCre)	**, p = 0.0096 (to dCre)	ns, p = 0.0521 (to dCre)
Significance				

Figure 6f	dCre	dCre + Dag1 gRNA	Cre	Cre + Dag1 gRNA
	0.07399437	0.152970875	0.105920813	0.189186156
	0.240058	0.078600055	0.023582816	0.343229219
		0.276714656	0.235149234	0.049740852
		0.094741336	0.083423867	0.088756281
		0.024394848	0.062349836	0.097094117
	1.113047	0.07453825	0.505035844	0.236606031
	0.2177181	0.060650957	0.077243258	0.44477025
	0.430611	0.008706488	0.203309938	0.255611781
	0.03278019	0.341865844	0.05439418	
	1.353603		0.013444664	
	0.3251208	0.328706344	0.149212828	0.57552875
	0.7693861	0.150327672	0.073906609	0.320148438
	0.3028154	0.027874043	0.138047297	0.482904125
	0.3486759	0.408728156	0.406146375	0.046889703
	0.2724544	0.211029719	0.013951248	
Average	0.456688688	0.159989232	0.14300792	0.260872142
Count (cells)	12	14	15	12
Statistical Test	2-way ANOVA with Tukey's multiple comparisons test			
Significance		*, p = 0.0123 (to dCre)	**, p = 0.0063 (to dCre)	ns, p = 4023 (to dCre)

	NMDAR-EPSCs			
Figure 6h	dCre	dCre + Dag1 gRNA	Cre	Cre + Dag1 gRNA
	0.37112735	1.83625	0.813398804	1.076017822
	0.694535767	0.148152313	2.626472412	0.581522644
	0.816284912	0.905649109	0.617216675	1.569328369
	1.315511841	1.646802612	0.250404358	0.532439087
	0.057595222	0.092072693	0.078903465	0.045541519
	0.128634232	0.048939213	0.35528775	0.071145027
	0.096125938	0.093399841		0.185211075
	0.023359358	0.006191372	0.050013329	0.325438599
	0.167145096	0.008552102	0.015279064	0.11013488
	0.095614426	0.093797729	0.306264832	0.059980179
	0.075727943			
Average	0.349242008	0.487980698	0.568137854	0.45567592
Count (cells)	11	10	9	10
Statistical Test	2-way ANOVA with Tukey's multiple comparisons test			
Significance		ns	ns	ns

	AMPAR-EPSCs			
Figure 6i	dCre	dCre + Dag1 gRNA	Cre	Cre + Dag1 gRNA
	2.358732666	2.915829346	0.583675903	0.979468201
	0.658214722	2.160535156	1.657297363	2.89213501
	1.105677612	1.045551147	5.009924805	1.766452637
	0.75769989	2.304394287	0.848229553	1.108194214
	0.741980042	0.805942688	0.534341003	1.164858887
	0.616252441	0.244198593	0.37730896	1.044040039
	0.30530304	0.283946869	0.644206543	0.468593994
	0.294131012	0.545852234	0.24519519	0.104488419
		0.32795343	1.767139771	1.126227783
	0.883407043	0.689507324	0.829792236	0.425960571
	0.634854187		0.313576599	
	0.922574707			
Average	0.84352976	1.132371107	1.164607993	1.108041976
Count (cells)	11	10	11	10
Statistical Test	2-way ANOVA with Tukey's multiple comparisons test			
Significance		ns	ns	ns

Sex info
Male
Female

Figure 8d	Ctrl	Dag1 gRNA
Gephyrin Puncta Density, Avg. per Animal		
	0.43640084	0.436584029
	0.449365861	0.425237566
	0.455509494	0.49300013
Mean	0.447092065	0.451607242
Number (# cells)	3	3
Statistical Test	two-tailed unpaired Welch's t-test	
t-value	0.2081	
df	2.287	
Significance	ns, p = 0.8522	

Figure 8d	Ctrl	Dag1 gRNA
Gephyrin Puncta Size, Avg. per Animal		
	0.186247542	0.194552
	0.189311989	0.184149
	0.175112783	0.193998
Mean	0.183557438	0.190899667
Number (# cells)	3	3
Statistical Test	two-tailed unpaired Welch's t-test	
t-value	1.34	
df	3.783	
Significance	ns, p = 0.2551	

Figure 8g	Ctrl	Dag1 gRNA
	3.909635296	2.299516587
	3.595656447	2.995040167
	4.35858981	3.959439665
	6.064980102	5.921750087
	8.087474461	1.3082139
	4.036191181	2.380620645
	3.625272568	1.69367998
	7.973655375	4.521415792
	6.793216867	3.816750266
	3.052829209	1.920266725
	5.200956353	8.245019654
	3.582337509	4.316385189
	4.444648672	1.461520339
	5.538836475	3.881500224
	7.491889883	3.335004599
	6.13878547	2.146423176
	2.407368504	2.522093606
	3.555799852	1.827618978
	7.421260714	1.341267677
		1.150447012
Mean	5.119967618	3.102198713
Number (# cells)	19	20
Statistical Test	two-tailed unpaired parametric t-test	
t-value	3.541	
df	37	
Significance	**, 0.0011	

Figure 8h	Ctrl	Dag1 gRNA
	108.2802053	59.68530047
	50.64075326	176.8284962
	118.207772	76.21474932
	60.19776909	45.2346832
	89.424501	21.84822956
	111.1759058	72.73580492
	29.81628505	41.95094409
	51.90787139	57.73432754
	28.36054598	61.36599194
	113.8104703	28.80612369
	38.73290899	27.30958785
	67.52041058	50.1498934
	50.85524441	39.12495601
	99.83105502	57.4950924
	123.9069941	50.97900089
	85.99441837	55.35536807
	118.1043532	87.35778537
	62.24492551	60.39623466
	66.79484883	32.19985023
		52.06958718
Mean	77.6740599	57.74210535
Number (# cells)	19	20
Statistical Test	two-tailed unpaired parametric t-test	
t-value	1.92	
df	37	
Significance	0.0626	

Figure 8j	Ctrl	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	cell 15	Mean	Number (# cells)	Statistical Test	Significance
	5uA	0.031474609	0.043486328	0	0	0.007141113	0.091515175	0.110262047	0.047985542	0.0693806	0.129817307	0.097531204	0				0.052382827	12		
	10uA	0.02628418	0.060776367	0	0	0.037841797	0.102711395	0.982356384	0.127104965	0.253462631	0.186468216	0.060016911	0.151181503				0.165683696	12		
	20uA	0.035904594	0.101010742	0.052040501	0.054248131	0.376037598	2.772379883	1.50570459	0.483328857	0.482195587	0.721340271	0.208338302	0.031250888				0.643565745	12		
	30uA	0.088775635	0.130922852	0.071965996	0.202257965	1.59128418	2.128801514	1.320086182	0.675057739	0.831288513	3.239874023	0.275560333	1.029508789				0.965448643	12		
	40uA	0.106132813	0.536416016	0.116586914	0.516092224	2.050795898	3.60232	1.296279541	0.836994446	0.929600586	3.419802734	0.413380618	1.160183495				1.248716107	12		
	50uA	0.126616211	0.52152832	1.983847656	0.737582275	1.85279541	3.417922852	1.379556519	0.925656189	1.232713623	3.205703369	0.375696686	1.530202031				1.440818845	12		
	75uA	0.798700684	0.499174683	2.975693848	0.914426209	3.00335498	2.548973389	1.677492432	1.299780273	1.250039185	3.287775391	0.461017212	1.487935171				1.483696121	12		
	100uA	0.951189819	0.897519531	3.212612305	1.243427368	2.836173584	1.672636475	1.8892323	1.73614502	1.34569458	3.255654297	0.731093994	2.374923096				1.845525197	12	Two-way ANOVA with Bonferroni Multiple comparisons test at each intensity (ctrl vs. Dag1 sgRNA: p value<0.0001)	
	Dag1 gRNA	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	cell 15				(compared to ctrl)
	5uA	0	0	0	0	0	0	0.032287598	0.01167977	0.06951458	0.118286133	0.056191048	0.052246094	0.129148041	0.037920784	0.088005516	0.039685304	15		>0.9999
	10uA	0	0	0.031463068	0.08427639	0	0.019917151	0	0.050070885	0.886066711	0.290036072	0.415649414	0.053716511	0.173754181	0.035330109	0.232666016	0.1514631	15		>0.9999
	20uA	0.112419334	0.00982307	0.058144531	0.195040802	0.279845001	0.157300873	0.0346143	0.078462486	0.958475281	0.365189728	0.817521545	0.146025864	0.376779999	0.238518204	0.276079956	0.273616065	15		>0.9999
	30uA	0.05980703	0.021563362	0.20378418	0.233376892	0.585796265	0.161785629	0.051740974	0.10731823	2.584055908	0.616752808	0.770276794	0.830465149	0.366377625	0.223796539	0.343096558	0.490666363	15		0.5697
	40uA	0.049901844	0.110265396	0.100991211	0.167736572	0.618221497	0.339723541	0.125036621	0.127388435	2.28573999	0.472150116	1.277739502	0.848197937	0.407491821	0.361313751	0.401812378	0.512914041	15		0.0516
	50uA	0.123102135	0.112563187	0.100058594	0.306545685	0.699374329	0.654956055	0.105578613	0.187721115	2.395504639	0.489929199	1.3316531	1.092434082	0.690314294	0.49766639	0.484058052	0.619090635	15		*, 0.019
	75uA	0.294210999	0.350881714	0.325490723	0.74230957	0.643015564	1.003979492	0.409556061	0.219996018	2.643435547	1.019368591	1.129436768	1.295481689	0.997099	0.942955017	0.764099121	0.852087725	15		*, 0.0171
	100uA	0.233569489	0.483326477	0.742670898	0.87916394	0.6121922	1.281112671	0.525480164	0.484514343	3.103018311	1.33657019	1.549746582	1.393406738	1.026324121	1.134314941	0.716927866	1.033483262	15		*, 0.0216

Figure 8k	Ctrl	Dag1 gRNA
	10.62550475	3.645751918
	8.805873242	5.390839994
	40.39377718	6.746950138
	14.10199631	9.256741527
	33.73833846	6.696902324
	15.96151562	14.417346
	12.80473751	5.701350381
	17.16271428	4.313186436
	13.37820452	27.85725361
	34.98470153	11.75106217
	6.413722686	13.02248327
	21.96850698	14.88843904
		10.24650226
		12.17131082
		6.826420951
Mean	19.19496609	10.19550272
Number (# cells)	12	15
Statistical Test	two-tailed unpaired parametric t-test	
t-value	2.665	
df	25	
Significance	*, 0.0133	

Figure 8l	Ctrl	Dag1 gRNA
	0.307302003	0.444587741
	0.371998124	0.347425134
	0.146834551	0.457595003
	0.153129044	0.188288923
	0.197922961	0.389014145
	0.151253648	0.735129968
	0.167889583	0.60624117
	0.320445735	0.465523295
	0.094573964	0.118239269
	0.142643303	0.358275495
	0.397936578	0.330202692
	0.252114904	0.221660146
		0.161286348
		0.169566094
		0.612903308
Mean	0.225337033	0.373729249
Number (# cells)	12	15
Statistical Test	two-tailed unpaired parametric t-test	
t-value	2.499	
df	25	
Significance	*, 0.0194	

Figure 8n	Ctrl	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	cell 15	Mean	Number (# cells)	Statistical Test	Significance
	PPR 20ms	0.631132638	0.553751999	0.897062675	1.241378573	0.667080217	0.552956731	0.580330664	0.601166998	0.539317135	0.734770715	0.981567309	0.791583981				0.731008303	12		
	PPR 50ms	0.753242573	0.69213681	1.044903825	0.888412017	0.850612881	0.596307637	0.7419849	0.54745353	0.332142049	0.829316616	1.090596408	0.758465759				0.760464584	12		
	PPR 100ms	0.991041593	0.850460542	1.182192124	0.912071185	0.837344827	0.773359063	0.557769256	0.534545484	0.498983611	0.808577581	1.238880522	0.718261539				0.82529061	12		
	PPR 500ms	0.564586598	0.699284282	0.942433935	0.92916978	0.831414369	0.429989857	0.785126866	0.801652688	0.565272	0.77850737	1.16701019	0.849577446				0.778668782	12	Two-way ANOVA with Bonferroni Multiple comparisons test at each PPR interval (ctrl vs. Dag1 sgRNA: **, p value=0.0024)	
	Dag1 gRNA	cell 1	cell 2	cell 3	cell 4	cell 5	cell 6	cell 7	cell 8	cell 9	cell 10	cell 11	cell 12	cell 13	cell 14	cell 15				(compared to ctrl)
	PPR 20ms	0.591979003	1.321339575	3.251087449	0.769447564	1.015054539	2.377504499	2.335096941	0.530300319	0.439970328	1.210002502	1.401069664	1.515203471	0.935971177	1.058561348	0.535322794	1.285860745	15		*, 0.0213
	PPR 50ms	0.707593675	1.317858115	0.762419007	0.706948044	0.659447105	3.221664611	1.866368252	0.58561396	0.663184244	1.119577301	1.749416521	1.0621295	0.681301703	0.641521118	1.288656271	1.135579962	15		0.228
	PPR 100ms	0.764808599	0.952697823	0.561193754	0.553718418	0.975345869	2.757802322	2.47220728	0.49935488	0.731149454	1.124975777	0.952675808	0.873160422	0.886924609	0.583607209	0.976273481	1.044393047	15		>0.9999
	PPR 500ms	1.009533104	0.934917856	0.745162369	0.63645839	0.999617417	1.457476853	0.532195917	0.51496537	0.739616839	1.121869649	1.02740597	0.878485018	0.678342627	0.530561623	0.878964459	0.845704897	15		>0.9999

Sex info

Male

Female

Figure 5d	Gephyrin Puncta Density, Avg. per Animal			
	Dendrite		Soma	
	Ctrl	Dag1 sgRNA	Ctrl	Dag1 sgRNA
	1.526869	0.843597	0.154881	0.104939
	1.311606	1.858334	0.130709	0.221581
	2.348503	1.536325	0.205448	0.210425
	1.417114	1.365429	0.154499	0.202417

	Dendrite		Soma	
Mean	[illegible]	[illegible]	[illegible]	[illegible]
Number (# animals)	4	4	4	4
Statistical Test	Unpaired two-tailed t-test with Welch's Correction		Unpaired two-tailed t-test with Welch's Correction	
t-value	[illegible]		[illegible]	
df	[illegible]		[illegible]	
Significance	ns, p [illegible]		ns, p [illegible]	

Figure 5d	Gephyrin Puncta Size Avg. per Animal			
	Dendrite		Soma	
	Ctrl	Dag1 sgRNA	Ctrl	Dag1 sgRNA
	0.165403	0.142322	0.162902	0.141129
	0.15703	0.178171	0.125497	0.125952
	0.155251	0.156403	0.14149	0.133431
	0.16161	0.160925	0.145049	0.136866

	Dendrite		Soma	
Mean	[illegible]	[illegible]	[illegible]	[illegible]
Number (# animals)	4	4	4	4
Statistical Test	Unpaired two-tailed t-test with Welch's Correction		Unpaired two-tailed t-test with Welch's Correction	
t-value	[illegible]		[illegible]	
df	[illegible]		[illegible]	
Significance	ns, p [illegible]		ns, p [illegible]	

Figure 5g	Ctrl	Dag1 sgRNA
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
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	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	1.869490844	2.14523366
		4.906089274
		3.841666899

Mean	[illegible]	[illegible]
Number (# animals)	22	24
Statistical Test	two-tailed unpaired parametric t-test	
t-value	2.315	
df	44	
Significance	* 0.032	

Figure 5h	Ctrl	Dag1 sgRNA
	61.79542645	38.9208428
	130.212569	61.90668042
	70.13673101	68.23730674
	66.5138057	34.07787927
	94.56195077	57.44927844
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
		[illegible]
		[illegible]

Mean	[illegible]	[illegible]
Number (# animals)	22	24
Statistical Test	two-tailed unpaired parametric t-test	
t-value	[illegible]	
df	44	
Significance	[illegible]	

Figure 5: Ctrl / Dag1 sgRNA cell-by-cell tables by intensity (values [illegible])

	Average	Count	Statistical Test	Significance
	[illegible]	[illegible]	Two-way ANOVA with Bonferroni Multiple comparisons test at each intensity (ctrl vs. Dag1 sgRNA: **, p value=0.0013)	(compared to ctrl) [illegible]

Figure 5: PPR tables, Ctrl / Dag1 sgRNA, cell 1 – cell 18 (values [illegible])

	Average	Count	Statistical Test	Significance
	[illegible]	[illegible]	Two-way ANOVA with Bonferroni Multiple comparisons test at each PPR interval (ctrl vs. Dag1 sgRNA: **, p value=0.0011)	[illegible]

Figure	Ctrl	Dag1 sgRNA
	[illegible]	[illegible]

Mean	[illegible]	[illegible]
Number (# animals)	[illegible]	[illegible]
Statistical Test	two-tailed unpaired parametric t-test	
t-value	[illegible]	
df	[illegible]	
Significance	[illegible]	

Figure	Ctrl	Dag1 sgRNA
	[illegible]	[illegible]

Mean	[illegible]	[illegible]
Number (# animals)	[illegible]	[illegible]
Statistical Test	two-tailed unpaired parametric t-test	
t-value	[illegible]	
df	[illegible]	
Significance	[illegible]	

Figure	Ctrl	Dag1 sgRNA
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	27.20126118	5.334224593
	19.96419702	7.505967391
	6.807166706	9.287063121
	7.290347684	4.632596493
	21.0617956	11.39609764
	15.74910688	12.31385516
	[illegible]	[illegible]
	[illegible]	[illegible]

Mean	[illegible]	[illegible]
Number (# animals)	20	20
Statistical Test	two-tailed unpaired parametric t-test	
t-value	[illegible]	
df	[illegible]	
Significance	[illegible]	

Figure	Ctrl	Dag1 sgRNA
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	53.03146525	43.36740936
	51.0223938	38.45518026
	26.67183182	26.94483826
	40.88824036	34.96884684
	49.03739502	21.00395121
	33.44152771	43.42662801
	[illegible]	[illegible]
	[illegible]	[illegible]

Mean	[illegible]	[illegible]
Number (# animals)	20	20
Statistical Test	two-tailed unpaired parametric t-test	
t-value	[illegible]	
df	[illegible]	
Significance	[illegible]	

Figure S1a	dCre	dCre + Nrxn3a (-SS4)	dCre + Nrxn3a (+SS4)	dCre + Nrxn3b (+SS4)	Cre	Cre + Nrxn3a (-SS4)	Cre + Nrxn3a (+SS4)	Cre + Nrxn3b (+SS4)
	0.184179813	0.132523391	0.112809039	0.212469641	0.362849313	0.014300614	0.170201797	0.008244272
	0.516034031	0.108467477	1.144635125	0.009742867	0.080754898	0.079138828	0.350381156	0.001572201
	0.153269688	0.285304313	0.346378938	0.207753125	0.498088313	0.056131234	0.140267266	0.001122983
	0.216897078	0.634393688	0.144387875	0.344235125	0.071051156	0.130748305	0.12140775	
	0.57171525	0.117355289	0.228069563	0.030268994	0.280509563	0.823991438	0.218572672	
		0.333540031						
	0.067119234		0.212084625	0.007029649	0.006869941	0.028232646	0.048105672	0.018294398
	0.018991566	0.435695531	0.010184222	0.269547469	0.006312526	0.028103434	0.205653672	0.006640425
	0.055050047	0.037417738	0.54872475	0.007917137	0.039493953	0.147968641	0.126755148	0.000350974
	0.096679422	0.128275039	0.074563742	0.033583039		0.01272389	0.073041789	0.009193352
	0.011834082	0.132610688		0.0222705	0.007688306			
						0.213402984	0.169983125	0.020588008
	0.830609125		0.381527656	0.048641852	0.207010906	0.183987828	0.425984125	0.015814412
	0.604184188	0.182053906	0.616769	0.432661813	0.019592262	0.905159625	0.185564109	0.005912603
	0.592879	0.976778563	0.118442094	0.039742832	0.025494992	0.329058531	0.685742	0.006224247
	0.056895133	0.458283625	0.292397188	0.085202234	0.075105211	0.230089094		0.087138047
	0.291643156	0.508208563	0.466116156	0.01397306	0.104828328			
		0.398557063			0.045287148			
	0.149115984							
	0.131776859							
	0.330084938							
	0.296013063							
	0.19267625							
	0.360642188							
	0.165656266							
	0.298955125							
	0.076521531							
	0.106366188							
	0.142602891							
	0.493508188							
	0.845217875							
	0.030788553							
	0.6855145							
Average	0.285780707	0.324630994	0.335506427	0.117669289	0.122062454	0.227359792	0.224743099	0.015091327
Count	30	15	14	15	15	14	13	12
Statistical Test	One-way ANOVA with Dunnett's multiple comparison test							
Significance		ns	ns	ns	ns	ns	ns	**, p = 0.0031

Figure S1b	dCre	dCre + Nrxn3a (-SS4)	dCre + Nrxn3a (+SS4)	dCre + Nrxn3b (+SS4)	Cre	Cre + Nrxn3a (-SS4)	Cre + Nrxn3a (+SS4)	Cre + Nrxn3b (+SS4)
	0.172900516	0.147628859	0.426429719	0.052199926	0.08994532	0.02735673	0.130763734	0.064350621
	0.138945453	0.166570484	0.05748875	0.119348359	0.05754648	0.057297309	0.027245523	0.300385938
	0.041784023	0.125379234	0.189357438	0.335354813	0.088014336	0.117863961	0.118510492	0.028194094
	0.04824059	0.117460977	0.202081781	0.097453203	0.04153818	0.020971979	0.031355678	0.037774453
		0.07175875	0.242168141	0.323941625				
	0.187374406				0.415725156	0.294442344	0.082677281	0.175065125
	0.199416328	0.176805844	0.123195039	0.029904594	0.360621406	0.175970672	0.189741234	0.202216656
	0.123923672	0.046846746	0.064127355	0.063642313	0.132333594	0.066926719	0.08895307	0.265621063
	0.081788984	0.166277516	0.019694625	0.153851578	0.100311016	0.407120156	0.144947547	0.077962063
	0.068353898	0.079766102	0.049177723	0.060529426	0.398671438	0.135114094	0.122186297	0.292406656
		0.055760875	0.062459543	0.124969148				
	0.057336391				0.582446	0.151896438	0.218407688	0.211084203
	0.131578859	0.166019234	0.435618969	0.37423725	0.191710422	0.337513125	0.3809835	0.113531352
	0.184666969	0.232899328	0.354688281	0.457417	0.150926484	0.063308051	0.026606115	0.247742641
	0.320672406	0.094221266	0.112987695	0.185119484	0.164241969	0.174373344	0.112115219	0.162228141
	0.351822875	0.076578414	0.3335195		0.132110516		0.118401977	0.155037438
	0.129770547							
	0.136397719							
	0.127870883							
	0.187718547							
	0.0647005							
	0.124405094							
	0.04485525							
	0.172780594							
	0.159539969							
	0.399236969							
	0.400889625							
	0.09124343							
	0.303677719							
	0.312901688							
Average	0.170171211	0.123140974	0.190928183	0.182920671	0.207581594	0.156165763	0.128063954	0.166685746
Count	28	14	14	13	14	13	14	14
Statistical Test	One-way ANOVA with Dunnett's multiple comparison test							
Significance		ns	ns	ns	ns	ns	ns	ns

	IPSC Charge	
Figure S1c	CTRL	Nrxn3b (+SS4)
	0.345903063	0.091930125
	0.461169031	0.019823619
	0.415922969	0.050931902
	0.379047906	0.092001266
	0.279923063	0.036017352
	0.160254672	0.054837168
	0.13295325	0.279817156
	0.845059875	0.108485586
	0.878630938	0.010681768
	0.981140125	0.087839922
	0.59734275	0.448897281
	0.646609313	0.371157719
	0.139396469	0.148149531
	0.498109188	0.087313555
	0.014579151	0.232181156
		0.059043805
	0.327678656	
	0.189382266	0.205759859
	0.193190828	0.33160725
	0.162173516	0.080424234
		0.411683875
	0.536585063	0.148563109
	0.09031875	0.024800535
	1.33266325	0.342029406
		1.180190125
Average	0.436728822	0.204340304
Count	22	24
Statistical Test	Unpaired two-tailed t-test with Welch's correction	
t value	2.661	
df	38.52	
Significance	*, p = 0.0113	

	NMDA EPSC Charge	
Figure S1d	CTRL	Nrxn3b (+SS4)
	0.183872766	0.033696805
	0.143652656	0.130113109
	0.869577875	1.1204615
	0.158806313	0.165253875
	0.07700025	0.193441578
	0.370902344	0.031689832
	0.04082391	0.2752975
	0.091058281	0.5264295
	0.210610375	0.089020219
	0.457153906	0.134514359
	0.109111625	
	0.146066547	0.046663695
	0.374963	0.508864
	0.08757918	0.069019078
	0.057311289	0.304277375
	0.302646469	0.223863734
Average	0.230071049	0.256840411
Count	16	15
Statistical Test	Unpaired two-tailed t-test with Welch's correction	
t value	0.2953	
df	25.29	
Significance	ns, p = 0.7701	

	mIPSC Frequency	
Figure S1f	dCre	Cre
	1.066666667	0.920833333
	4.404166667	1.333333333
	2.8	5.3375
	3.595833333	0.175
	2.125	0.591666667
	0.441666667	1.354166667
	4.5875	2.245833333
	3.4125	0.9625
	6.179166667	6.291666667
	0.195833333	0.208333333
	3.070833333	0.029166667
	0.158333333	0.95
	6.883333333	1.220833333
	6.733333333	0.270833333
		0.32
Average	3.261011905	1.480777778
Count	14	15
Statistical Test	Unpaired two-tailed t-test with Welch's correction	
t value	2.266	
df	24.94	
Significance	*, p = 0.0324	

	mIPSC Amplitude	
	dCre	Cre
	48.751831	49.422012
	61.820564	36.538712
	88.837051	41.517723
	42.643044	30.685257
	44.222057	67.094864
	35.121231	39.904263
	43.812778	41.958763
	43.69558	63.694691
	48.555325	100.563744
	36.982784	56.726528
	49.005009	37.738255
	69.158958	43.307274
	57.806011	38.840649
	56.243481	34.165604
		51.941872
Average	51.90397886	48.94001407
Count	14	15
Statistical Test	Unpaired two-tailed t-test with Welch's correction	
t value	0.4972	
df	26.4	
Significance	ns, p = 0.6231	

	mIPSC Decay	
Figure S1g	dCre	Cre
	18.173332	15.151967
	22.525948	18.832672
	16.075632	17.478884
	18.973219	16.758999
	19.06813	14.715192
	21.991556	17.967175
	17.552132	16.986338
	17.163748	16.26474
	14.805205	14.888712
	22.883045	15.110542
	17.639212	14.107884
	18.637833	20.572859
	14.077933	18.734268
	19.648577	22.746523
		22.894957
Average	18.515393	17.54744747
Count	14	15
Statistical Test	Unpaired two-tailed t-test with Welch's correction	
t value	0.9556	
df	26.99	
Significance	ns, p = 0.3478	

	mIPSC Rise Time	
	dCre	Cre
	1.616022	1.614003
	1.829803	1.476859
	1.680236	1.748508
	2.439566	1.581552
	2.004077	1.400808
	1.604385	1.682388
	1.252414	1.737455
	1.40623	1.561611
	1.193044	1.224215
	1.376423	1.004603
	1.291497	1.72433
	2.336378	1.911399
	1.197355	1.605655
	1.62662	2.077952
		2.544178
Average	1.632432143	1.659701067
Count	14	15
Statistical Test	Unpaired two-tailed t-test with Welch's correction	
t value	0.1931	
df	26.08	
Significance	ns, p = 0.8484	

	mIPSC Frequency				
Figure S1i	dCre	Cre	Cre + Nrx3aSS4-	Cre + Nrx3aSS4+	Cre + Nrx3bSS4+
	0.570833333	0.358833333	0.2	0.295833	0.2
	7.2	0.320833333	2.8375	0.054167	0.07
	3.945833333	0.255	7.216666667	0.8125	0.06
	2.725	0.045833333	0.058333333	2.608333	0.49
	1.9125	0.275	4.2125	3.2375	0.09
	0.1625	0.041666667	0.15	0.454167	0.05
	0.641666667	0.204166667	3.008333333	0.1125	0.14
	0.566666667	0.595833333	0.829166667	0.3625	0.07
	0.570833333	1.683333333	0.429166667	0.141667	0.25
	0.4625		1.816666667	6.833333	0.08
			0.695833333	0.620833	0.64
			0.716666667	7.666667	0.05
			2.825	0.141667	0.22
			0.333333333	0.120833	0.12
Average	1.875833333	0.42	1.809226191	1.675892857	0.180714286
Count	10	9	14	14	14
Statistical Test	One Way ANOVA with Dunnett's multiple comparison test				
Significance		ns	ns	ns	ns, p = 0.0896

	mIPSC Amplitude				
	dCre	Cre	Cre + Nrx3aSS4-	Cre + Nrx3aSS4+	Cre + Nrx3bSS4+
	68.406891	31.184708	44.639023	45.35992	41.786243
	69.406616	34.419247	25.583582	42.29163	31.004263
	40.533661	38.884315	34.789028	41.41488	45.898438
	39.219593	32.891167	30.63868	58.35344	102.891937
	39.119232	42.073158	62.892738	27.53627	62.03949
	37.118416	41.205513	36.449669	62.96078	38.717251
	36.787994	59.7328	37.52206	35.07386	82.46727
	66.117928	51.417019	41.911488	28.83073	43.207306
	69.323166	39.025906	36.64677	30.77688	70.832428
	41.315117		21.116858	37.58856	37.231445
			46.370068	42.64996	54.191418
			33.363914	44.26833	32.927685
			36.190269	50.66516	62.716232
			46.132404	35.86108	49.559578
Average	50.7348614	41.20375922	38.16046793	41.68796286	53.96221314
Count	10	9	14	14	14
Statistical Test	One Way ANOVA with Dunnett's multiple comparison test				
Significance		ns	ns	ns	ns

	mIPSC Frequency			
Figure S1k	dCre	dCre + Nrx3b	Cre	Cre + Nrx3b
	6.929166667	0.0125	1.025	0.041666667
	0.129166667	0.204166667	0.445833333	0.00833
	1.495833333	0.033333333	0.520833333	0.379166667
	0.258333333	0.020833333	0.2625	0.0125
	0.220833333	0.020833333	0.229166667	0.104166667
				0.116666667
	0.770833333	0.070833333	7.4	4.016666667
	0.158333333	0.075	0.495833333	0.1125
	0.125	0.045833333	0.65	0.145833333
	0.516666667	0.054166667		0.433333333
	7.15	0.025		0.070833333
	0.15	1.091666667	2.945833333	0.070833333
	7.033333333	0.154166667	2.2	0.020833333
	3.208333333	0.141666667	0.095833333	0.9
	1.020833333	0.020833333	2.025	0.6
	0.2	0.204166667	0.566666667	1.791666667
	1.966666667		0.120833333	0.1
	1.179166667		1.0625	0.0625
	2.170833333		0.016666667	
			0.175	
	1.333333333	0.175	0.308333333	0.320833333
	1.1125	0.158333333	0.120833333	0.0625
	1.3375	0.133333333	0.0625	0.0875
	0.620833333	0.095833333	0.1	0.204166667
	1.191666667	1.6625	0.804166667	0.091666667
	0.554166667	0.045833333	0.675	0.029166667
	2.108333333	0.354166667	0.433333333	0.2875
	0.416666667	0.055555556	0.7	0.104166667
	1.729166667	0.5375	0.854166667	0.0375
	0.175	0.15	0.761111111	2.195833333
Average	1.616517857	0.221722222	0.928034979	0.443154643
Count	28	25	27	28
Statistical Test	One Way ANOVA with Dunnett's multiple comparison test			
Significance		**, p = 0.0010	ns, p = 0.16	**, p = 0.0050

	mIPSC Amplitude			
	dCre	dCre + Nrx3b	Cre	Cre + Nrx3b
	48.634289	35.760788	56.514019	37.94294
	47.018448	46.348991	45.16227	22.181919
	42.691334	50.619942	47.068779	98.941917
	33.716438	43.30706	56.619312	36.975677
	43.266853	50.896343	39.934429	42.347935
				50.206398
	44.884575	50.16531	37.290131	48.431755
	63.584927	47.911606	44.299431	33.759766
	34.38699	42.314598	46.982208	23.689777
	67.863716	34.84375	33.455906	28.23571
	38.708496	90.018135	51.713654	76.088631
	82.831108		26.189554	32.86845
	59.320034		41.295479	34.262695
	44.322674		30.285645	
			60.292854	
	36.887436	66.17897	35.407978	35.532604
	37.795624	59.617855	33.84631	36.429039
	60.960144	68.044281	58.382164	43.51981
	65.956314	39.219597	33.117676	34.586754
	61.870441	30.416801	33.921886	37.760788
	70.900391	36.52644	38.5275	62.271248
	59.208473	44.038662	29.142906	55.937965
	44.213867	62.184052	31.560902	33.835018
	140.107025	41.741035	34.241688	30.497631
	39.92503	65.222847	29.468266	42.500969
Average	55.17628813	50.26885315	40.61337279	42.55675635
Count	23	20	24	23
Statistical Test	One Way ANOVA with Dunnett's multiple comparison test			
Significance		ns	*, p = 0.0112	*, p = 0.035

Measure	Group	Average	Count	Statistical Test	t value	df	Significance
Figure S2b							
Homer1 Puncta Density, Avg. Per Culture	ΔCre	0.24881683	3	Unpaired two-tailed t test with Welch's correction	0.7312	3.48	ns, p = 0.5108
	Cre	0.27336084	3				
Homer1 Puncta Density, Pseudoreplicate	ΔCre	0.24794782	52	Unpaired two-tailed t test with Welch's correction	0.9198	103	ns, p = 0.3598
	Cre	0.27022857	53				
Gephyrin Puncta Density, Avg. Culture	ΔCre	0.16671195	3	Unpaired two-tailed t test with Welch's correction	0.7542	3.32	ns, p = 0.5006
	Cre	0.20634746	3				
VGAT Puncta Density, Avg. Culture	ΔCre	0.13838428	3	Unpaired two-tailed t test with Welch's correction	0.4023	2.37	ns, p = 0.7210
	Cre	0.15533396	3				
Gephyrin Puncta Density, Pseudoreplicate	ΔCre	0.16340959	52	Unpaired two-tailed t test with Welch's correction	1.561	102	ns, p = 0.1215
	Cre	0.20122159	53				
VGAT Puncta Density, Pseudoreplicate	ΔCre	0.13715154	52	Unpaired two-tailed t test with Welch's correction	0.7546	103	ns, p = 0.4522
	Cre	0.15211393	53				
Figure S2c							
Gephyrin Puncta Size, Avg. Per Culture	ΔCre	0.31400272	3	Unpaired two-tailed t test with Welch's correction	0.1738	2.59	ns, p = 0.8747
	Cre	0.32696911	3				
Gephyrin Puncta Size, Pseudoreplicate	ΔCre	0.31826817	50	Unpaired two-tailed t test with Welch's correction	1.526	81	ns, p = 0.1308
	Cre	0.26956691	50				
Homer1 Puncta Size, Avg. Per Culture	ΔCre	0.32313954	3	Unpaired two-tailed t test with Welch's correction	1.515	3.97	ns, p = 0.2049
	Cre	0.40541289	3				
Homer1 Puncta Size, Pseudoreplicate	ΔCre	0.32365402	52	Unpaired two-tailed t test with Welch's correction	1.517	98.5	ns, p = 0.1325
	Cre	0.36320083	50				
vGAT Puncta Size, Avg. Per Culture	ΔCre	0.9531134	3	Unpaired two-tailed t test with Welch's correction	0.2931	2.81	ns, p = 0.7898
	Cre	0.99083033	3				
vGAT Puncta Size, Pseudoreplicate	ΔCre	0.94376789	48	Unpaired two-tailed t test with Welch's correction	0.4875	96	ns, p = 0.6270
	Cre	0.9961794	50				
Figure S2d							
Gephyrin Intensity, Avg. Per Culture	ΔCre	1011.764	3	Unpaired two-tailed t test with Welch's correction	0.4463	3.94	ns, p = 0.6788
	Cre	916.486627	3				
Gephyrin Intensity, Pseudoreplicate	ΔCre	1022.44286	50	Unpaired two-tailed t test with Welch's correction	1.769	88	ns, p = 0.0804
	Cre	915.826333	51				
Homer1 Intensity, Avg. Per Culture	ΔCre	349.91021	3	Unpaired two-tailed t test with Welch's correction	0.9807	2.6	ns, p = 0.4090
	Cre	238.115522	3				
Homer1 Intensity, Pseudoreplicate	ΔCre	350.628942	52	Unpaired two-tailed t test with Welch's correction	4.221	69.1	****, p <0.0001
	Cre	234.342469	52				
vGAT Intensity, Avg. Per Culture	ΔCre	437.540301	3	Unpaired two-tailed t test with Welch's correction	0.7519	2.86	ns, p = 0.5091
	Cre	529.271862	3				
vGAT Intensity, Pseudoreplicate	ΔCre	440.881528	48	Unpaired two-tailed t test with Welch's correction	2.391	84.2	*, p = 0.019
	Cre	540.198931	50				

Figure S2e

sGABAARα1 Levels (dendrite) - avg. per culture		Average	Count	Statistical Test	t value	df	Significance
dCre	MAP2	100	3				
	VGAT having MAP2	100	3				
	VGAT Having MAP2 and Homer1	100	3				
	VGAT having MAP2 not Homer1	100	3				
Cre	MAP2	115.749777	3	Unpaired two-tailed t test with Welch's correction	0.8615	2	ns, p =0.479
	VGAT having MAP2	122.12411	3	Unpaired two-tailed t test with Welch's correction	0.6816	2	ns, p =0.565
	VGAT Having MAP2 and Homer1	131.991967	3	Unpaired two-tailed t test with Welch's correction	1.293	2	ns, p =0.325
	VGAT having MAP2 not Homer1	121.36309	3	Unpaired two-tailed t test with Welch's correction	0.4509	2	ns, p =0.696
sGABAARα1 Levels (dendrite) - Pseudoreplicate							
dCre	MAP2	100.594785	57				
	VGAT having MAP2	100.000003	45				
	VGAT Having MAP2 and Homer1	100.000003	34				
	VGAT having MAP2 not Homer1	100.000005	34				
Cre	MAP2	114.518198	56	Unpaired two-tailed t test with Welch's correction	0.9217	109	ns, p =0.359
	VGAT having MAP2	119.555093	39	Unpaired two-tailed t test with Welch's correction	1.02	67.1	ns, p =0.312
	VGAT Having MAP2 and Homer1	130.814886	29	Unpaired two-tailed t test with Welch's correction	1.66	51.2	ns, p =0.103
	VGAT having MAP2 not Homer1	118.401944	32	Unpaired two-tailed t test with Welch's correction	0.6605	53.7	ns, p =0.512
sGABAARα1 Levels (soma) - avg. per culture							
dCre	MAP2	100	3				
	VGAT having MAP2	100	3				
	VGAT Having MAP2 and Homer1	100	3				
	VGAT having MAP2 not Homer1	100	3				
Cre	MAP2	112.13388	3	Unpaired two-tailed t test with Welch's correction	0.5815	2	ns, p =0.620
	VGAT having MAP2	96.8248833	3	Unpaired two-tailed t test with Welch's correction	0.1835	2	ns, p =0.871
	VGAT Having MAP2 and Homer1	101.815373	3	Unpaired two-tailed t test with Welch's correction	0.1092	2	ns, p =0.923
	VGAT having MAP2 not Homer1	91.3450433	3	Unpaired two-tailed t test with Welch's correction	0.7899	2	ns, p =0.512
sGABAARα1 Levels (soma) - Pseudoreplicate							
dCre	MAP2	99.999997	27				
	VGAT having MAP2	99.9999984	25				
	VGAT Having MAP2 and Homer1	99.9999942	24				
	VGAT having MAP2 not Homer1	100.000005	23				
Cre	MAP2	113.088468	28	Unpaired two-tailed t test with Welch's correction	0.7947	50.1	ns, p =0.431
	VGAT having MAP2	98.9792696	27	Unpaired two-tailed t test with Welch's correction	0.07471	48.2	ns, p =0.941
	VGAT Having MAP2 and Homer1	106.22976	23	Unpaired two-tailed t test with Welch's correction	0.4491	39.8	ns, p =0.656
	VGAT having MAP2 not Homer1	92.7500644	27	Unpaired two-tailed t test with Welch's correction	0.5025	47.7	ns, p =0.618

Figure S2f

sGABAARα2 Levels (dendrite) - avg. per culture		Average	Count	Statistical Test	t value	df	Significance
dCre	MAP2	100	3				
	VGAT having MAP2	100	3				
	VGAT Having MAP2 and Homer1	100	3				
	VGAT having MAP2 not Homer1	100	3				
Cre	MAP2	104.282557	3	Unpaired two-tailed t test with Welch's correction	1.151	2	ns, p =0.369
	VGAT having MAP2	105.393733	3	Unpaired two-tailed t test with Welch's correction	0.846	2	ns, p =0.487
	VGAT Having MAP2 and Homer1	122.09297	3	Unpaired two-tailed t test with Welch's correction	1.675	2	ns, p =0.236
	VGAT having MAP2 not Homer1	90.07392	3	Unpaired two-tailed t test with Welch's correction	1.427	2	ns, p =0.290
sGABAARα2 Levels (dendrite) - Pseudoreplicate							
dCre	MAP2	100.000001	76				
	VGAT having MAP2	100.000001	58				
	VGAT Having MAP2 and Homer1	100.000006	49				
	VGAT having MAP2 not Homer1	100	48				
Cre	MAP2	103.822964	75	Unpaired two-tailed t test with Welch's correction	0.3729	148	ns, p =0.709
	VGAT having MAP2	103.736805	54	Unpaired two-tailed t test with Welch's correction	0.3268	108	ns, p =0.744
	VGAT Having MAP2 and Homer1	114.308909	41	Unpaired two-tailed t test with Welch's correction	0.9845	80.9	ns, p =0.328
	VGAT having MAP2 not Homer1	89.6259029	39	Unpaired two-tailed t test with Welch's correction	0.7867	83.9	ns, p =0.434
sGABAARα2 Levels (soma) - avg. per culture							
dCre	MAP2	100	3				
	VGAT having MAP2	100	3				
	VGAT Having MAP2 and Homer1	100	3				
	VGAT having MAP2 not Homer1	100	3				
Cre	MAP2	85.6978567	3	Unpaired two-tailed t test with Welch's correction	1.429	2	ns, p =0.289
	VGAT having MAP2	72.0811567	3	Unpaired two-tailed t test with Welch's correction	3.043	2	ns, p =0.0932
	VGAT Having MAP2 and Homer1	75.24247	3	Unpaired two-tailed t test with Welch's correction	2.24	2	ns, p =0.154
	VGAT having MAP2 not Homer1	80.7741667	3	Unpaired two-tailed t test with Welch's correction	1.596	2	ns, p =0.252
sGABAARα2 Levels (soma) - Pseudoreplicate							
dCre	MAP2	100.000003	28				
	VGAT having MAP2	100.000003	27				
	VGAT Having MAP2 and Homer1	99.9999969	26				
	VGAT having MAP2 not Homer1	100.000001	27				
Cre	MAP2	84.5754022	27	Unpaired two-tailed t test with Welch's correction	1.304	49.9	ns, p =0.198
	VGAT having MAP2	85.94671	24	Unpaired two-tailed t test with Welch's correction	1.072	46.6	ns, p =0.289
	VGAT Having MAP2 and Homer1	74.5364591	22	Unpaired two-tailed t test with Welch's correction	2.28	44.5	*, p =0.027
	VGAT having MAP2 not Homer1	81.5467432	22	Unpaired two-tailed t test with Welch's correction	1.07	45.5	ns, p =0.290

Figure S2g

sGABAARγ2 Levels (dendrite) - avg. per culture		Average	Count	Statistical Test	t value	df	Significance
dCre	MAP2	100	3				
	VGAT having MAP2	100	3				
	VGAT Having MAP2 and Homer1	100	3				
	VGAT having MAP2 not Homer1	100	3				
Cre	MAP2	124.4462	3	Unpaired two-tailed t test with Welch's correction	1.54	2	ns, p =0.263
	VGAT having MAP2	105.40633	3	Unpaired two-tailed t test with Welch's correction	0.3675	2	ns, p =0.749
	VGAT Having MAP2 and Homer1	106.427923	3	Unpaired two-tailed t test with Welch's correction	0.7329	2	ns, p =0.540
	VGAT having MAP2 not Homer1	110.580983	3	Unpaired two-tailed t test with Welch's correction	0.4325	2	ns, p =0.708
sGABAARγ2 Levels (dendrite) - Pseudoreplicate							
dCre	MAP2	100.000001	79				
	VGAT having MAP2	99.9999959	63				
	VGAT Having MAP2 and Homer1	100	53				
	VGAT having MAP2 not Homer1	99.9999982	46				
Cre	MAP2	120.501637	80	Unpaired two-tailed t test with Welch's correction	2.273	146	*, p = 0.0245
	VGAT having MAP2	101.073728	60	Unpaired two-tailed t test with Welch's correction	0.09844	107	ns, p =0.922
	VGAT Having MAP2 and Homer1	106.018144	49	Unpaired two-tailed t test with Welch's correction	0.5892	99	ns, p =0.557
	VGAT having MAP2 not Homer1	103.280849	43	Unpaired two-tailed t test with Welch's correction	0.1697	67	ns, p =0.866
sGABAARγ2 Levels (soma) - avg. per culture							
dCre	MAP2	100	3				
	VGAT having MAP2	100	3				
	VGAT Having MAP2 and Homer1	100	3				
	VGAT having MAP2 not Homer1	100	3				
Cre	MAP2	94.9104033	3	Unpaired two-tailed t test with Welch's correction	0.3617	2	ns, p =0.752
	VGAT having MAP2	102.290537	3	Unpaired two-tailed t test with Welch's correction	0.4586	2	ns, p =0.692
	VGAT Having MAP2 and Homer1	97.0766167	3	Unpaired two-tailed t test with Welch's correction	0.4543	2	ns, p =0.694
	VGAT having MAP2 not Homer1	89.11749	3	Unpaired two-tailed t test with Welch's correction	1.516	2	ns, p =0.269
sGABAARγ2 Levels (soma) - Pseudoreplicate							
dCre	MAP2	99.9999989	28				
	VGAT having MAP2	99.9999958	26				
	VGAT Having MAP2 and Homer1	100	24				
	VGAT having MAP2 not Homer1	96.8714383	23				
Cre	MAP2	94.3679886	28	Unpaired two-tailed t test with Welch's correction	0.553	53.9	ns, p =0.583
	VGAT having MAP2	98.6372868	28	Unpaired two-tailed t test with Welch's correction	0.116	47.6	ns, p =0.908
	VGAT Having MAP2 and Homer1	93.411447	27	Unpaired two-tailed t test with Welch's correction	0.5532	46.1	ns, p =0.583
	VGAT having MAP2 not Homer1	88.9673048	25	Unpaired two-tailed t test with Welch's correction	0.6853	41.4	ns, p =0.497

0.307481	0.276499295 0.291358	0.258972697 0.255357	0.021505376 0.183657	0.58437734 0.281842	0.368867946 0.589185	0.149035043 0.293594	0.213919441 0.264988	0.04663056 0.282916	0.046274954 0.429099	
0.015124	0.280199205 0.50012	0.151371052 0.276715	0.186838192 0.231865	0.077294686 0.258235	0.049892778 0.428033	0.138950195 0.380999	0.205276814 0.194397	0.151768004 0.077784	0.02392917 0.193594	
0	0.045945325 0.203209	0.147772852 0.11961	0 0.050034	0.115942029 0.149607	0.049892778 0.091385	0.035495156 0.23774	0.278968978 0.086622	0.165582914 0.138918	0.095716679 0.193594	
0.3	0.13333333 0.387251	0.105 0.139481	0.09611111 0.320833	0.755 0.280513	0.545 0.242222	0.26 0.255731	0.90833333 0.587708	0.60727273 0.12625	0.73 0.337273	
0.431389	0.20247619 0.4165	0.14166667 0.412778	0.1 0.652857	0.52159091 0.438283	0.32930556 1.909*	0.29125 0.237778	0.24611111 0.535417	0.17 0.223333	0.26 0.394848	
	0.56 1.044444	1.07714286 2.243667	1.4125	0.10833333 1.161667	1.13 2.477	1.695 1.876	2.54938889 0.365	1.785 0.540625	1.1175 0.674545	
807.61	594.8133	556.9133	1048.155	1008.16	673.1667	479.4 584.3567	569.07 604.745	535.1933 510.26	1645.54 537.76	889.33
187.6633333	283.2967 211.5667	237.4033 192.6967	230.38 305.53	255.5367 139.8233	262.6033 157.4167	228.335 129.61	239.7267 206.23	263.3 217.85	241.735 156.79	
	266.26 322.8967	656.44 401.18	531.765	139.65 480.445	267.94 771.02	490.39 509.28	433.5167 243.55	286.87 298.24	366.68 232.87	

0.307481	0.154294383 0.095740502	0.094633182 0.310001322	0.266671027 0.400655204	0.260745793 0.346232618	0.0937053 0.409690552	0.18166294 0.25700632	0.371926313 0.265715832	0.255735147 0.413804736	
0.015124	0.409549817 0	0 0.156363839	0.196393655 0.409984233	0.736085363 0.269470292	0.275062546 0.237236394	0.043773255 0.374201974	0.349170954 0.315833147	0.334397881 0.271585421	
0	0.076941397 0.109682411	0 0.04940646	0.138042341 0.027446137	0.479124769 0.191137256	0.204539326 0.050305959	0 0.074607711	0.377946561 0.18930216	0.253577796 0	
0.3	0.30259259	0.312777778	0.20816667 0.221766382	0.32088889 2.669*	0.20714286 0.398944444	0.095 0.352047619	0.30722222 0.351904762	0.32175 0.153333333	
0.431389	0.38111111 0.156666667	0.09833333 0.4535	0.19111111 0.429	0.198 0.329191919	0.27666667 0.341474359	0.215625 0.52765873	0.4115 0.207555556	0.2375 0.482222222	
	1.64333333 0.766	0.9	0.62416667 0.385	1.31314815 1.23	1.14033333 0.385	1.59375	1.08611111 0.757142857	0.84944444	
807.61	566.67	947.005	886.54	604.18		649.4667	743.1566667	588.1067 739.83	802.1 868.29
187.6633333	313.2133 152.3333333	247.9367 230.2366667	230.4367 209.495	298.72 167.36	323.4033 229.8966667	247.54 236.0633333	283.7367 181.1933333	243.885 219.9266667	
	466.07 296.555	400.87	180.695 186	405.2167 369.735	453.93 141.58	261.205	478.3933 201.52	336.6733	

33.48021	12.2502	63.34532	
42.33584	34.76389	65.59058	79.18105
41.91633	33.61175	58.37682	
36.64892		100.06	107.9747
39.44164	43.93734		
105.0972			
115.9903			
82.4835			

39.16337	42.11664	93.33142	49.09946	21.34694	19.13479	39.46503	19.93921	14.83709	39.12985	45.91157	64.66649	82.74361	68.91204	140.5837	202.2075	106.7496	96.00538	55.70986	77.15363
102.6496	185.8874	55.05906	10.14853	22.74097	38.40238	39.24474	19.55933	222.0497	110.0081	68.85802	89.65206	97.44521		213.8005		174.7543	82.98026	78.18902	2.296363
74.21718	198.0743	55.76811	5.474394	12.98871	40.25986	41.04813	21.78253		172.8461	73.92536	125.7399	101.9231		224.0573			76.91649	83.45434	
100.8319	174.6998	103.43	12.82897	45.78832	25.77273		2.999862	215.917	103.1326	33.25884	74.58439			199.8064		169.9278	84.52828	73.22532	2.232941
197.6082	234.2987	52.25383	61.55681	72.68835	206.5872	39.19316	57.79912	81.26746	50.73437	55.97427	64.97932	47.02509	46.48509	203.768	217.6554	226.3737			
	51.73256	73.02757	150.0926	223.0235					72.34349	87.70712	55.26295	10.70116	126.7131	134.1736	142.3665				
		84.09971	158.1738	233.272						101.0223	57.80241	11.1929	144.3124	135.8806					
	50.30377	46.75611	145.8272						70.34545	64.13965			89.08024	135.4007	138.4345				

51.51454	20.42581	25.89501	21.59136	27.10597	166.0047	233.9963	177.4256	187.2051	102.0075	110.6277	79.20016	30.69293	36.1586	23.95518	69.69614	112.711	120.5162	50.67663	113.8129	155.8579	
39.5808	19.90921	25.1273	12.46702	97.69895	137.7296	158.8966			59.4108	62.73111			62.75646	40.50909	134.8465	128.2788	147.2597		119.7309	223.5192	
37.97189	9.182969	33.06181	12.29081	105.8446	208.0766	156.6508			46.98307				65.83939	49.72859	198.0929	128.8458	145.7968		109.5178		
88.9494	26.04585	23.48384		60.31853	140.4888				195.6028	75.9399			48.93905	26.59047	39.99118	100.2598	26.94332		182.5204	270.5838	
80.13564	93.49063	102.6847	155.4389	55.91072	94.49498	63.81926	277.9352	166.4696	169.804	34.36024	45.14409	28.98267	179.331	164.9946	200.4338	98.77064	75.07372	119.4143	76.46259	34.8079	135.6905
		111.3921	130.9623				185.4306	149.7531	127.0463	49.45303	46.54458			97.49302	101.7194	196.2407	52.30444	87.07268	102.0711	50.22924	145.7041
		109.8177	129.5704				192.302	312.78	125.2507	48.75407	45.95857			120.3687	125.588	193.467	52.36791	83.72744	99.82262	63.80289	147.0025
			157.4104				195.9096	157.8208			54.04006			23.71396	79.57198		45.04617	127.3336	147.822	44.07199	157.372

Datapoints

	0.162413	0.215625	0.334817	0.385309	0.222681	0.174779	0.089062	0.094114	0.409507		0.211347		0.17702		0.389947		0.358869		0.281459		0.202268		0.420773	0.226879	
	0.231057	0.311105	0.204122	0.380168	0.246278	0.033033	0.144657	0.138926			0.153709		0.460853		0.226431		0.383818		0.375892		0.568858		0.371226	0.318739	
	0.030525	0.077071	0.331875	0.21384	0.299888	0.203724	0.155798	0.094114	0.25748		0.190138		0.194049		0.016205		0.177831		0.095702		0.115398		0.189794	0.117089	
	0.212193	0.238871	0.368235	0.41655	0.312506	0.071194	0.246185	0.169824	0.107502	0.308318		0.111649		0.219331		0.220612		0.207722		0.260198		0.229374			
	0.030525	0.077071	0.256593	0.055586	0.171737	0.152816	0.13359	0.260538	0.26899		0.20332		0.116347		0.162461		0.162932		0.054141		0.225407		0.249501	0.029551	
	0.111782	0.238814	0.355097	0.412873	0.264639	0.01908	0.257971	0.314812			0.348623		0.216294		0.254433		0.190546		0.278945		0.293681		0.182031	0.035746	
	0.135	0.49	0.4575	0.1525	0.233333	0.53	0.185	0.15	0.310833		0.136889		0.366667		0.04		0.229444		0.316667		0.438333		0.238889	0.096667	
	0.29	0.366603	0.165667	0.282159	0.315667	0.11	0.258889	0.139643			0.17		0.441333		0.088333		0.238667		0.47881		0.203667		0.351667	0.217333	
	0.226984	0.245556	0.358111	0.517013	0.35	0.620476	0.205	0.305	0.400714		0.391667		0.26		0.323286		0.532381		0.306417		0.248333		0.619206	0.406667	
	0.29619	0.260185	0.325556	0.35225	0.274762	0.99*	0.249444	0.281429			0.116667		0.60027		0.23		0.664194		0.552035		0.580121		0.338741	0.421944	
	0.56	0.6825	1.755	0.093333	1.059167	1.683333	0.953333	0.368889	1.247111		0.460476		1.05		0.2175		0.469333		0.9875		0.94075		0.647619	0.46	
	0.776	1.755635	1.246	1.713778	1.884214	0.53	0.821111	0.440741			0.8275		1.407778		0.568889		0.683778		1.148889		0.424196		0.935556	0.65	
757.93	500.47	638.06	661.565			1189.1	1662.78	1775.737	962.445	1322.7		1578.81		1304.323		1022.007		1018.797			1123.233		1704.703	850.67	1490.65
650.655	589.1333333	587.7166667	658.51			1036.807	1121.233	1272.12	1257.093	1114.077		1044.705		1256.47		980.575					1150.353		1281.95	908.1067	1386.643
	695.45	730.5633	839.31	534.5033	756.655	861.28	606.2367	544.7833	460.21		436.0433		390.1		577.655		421.71		495.27		350.1967		437.92	513.08	
	397.0633	263.0933	345.3567	406.5133	402.6167	372.465	410.56	290.485			272.95		234.7933		240.715		339.7633		204.65		225.35		379.95	347.4567	
	357.08	454.945	688.5633	176.41	345.305	791.72	403.04	213.18	278.2867		451.6467		505.31		266.27		386.575		479.375		341.05		334.7733	270.19	
	295.27	494.6833	634.4767	573.9267	925.3067	380.95	574.3633	398.4033			485.91		619.2733		339.53		496.5		524.2533		350.94		502.76	723.69	

Datapoints

[illegible] [illegible] [illegible] [illegible]

Figure S3b

Tissue	Nrxn1 SS4 Inclusion	
	Replicate 1	Replicate 2
OB	71.7208675	73.4044161
Cx	40.3062898	41.1188425
Cer	94.3704878	94.1069557
BS	63.5638871	69.5460111
Eye	60.3800097	61.2033195
Hipp	40.826907	42.8999145

Tissue	Nrxn2 SS4 Inclusion	
	Replicate 1	Replicate 2
OB	66.2033743	64.5215211
Cx	39.3448176	38.8608044
Cer	81.1493241	82.1305221
BS	52.1439123	51.4460076
Eye	53.6475466	53.6708987
Hipp	40.2637603	41.1503027

Tissue	Nrxn3SS4 Inclusion	
	Replicate 1	Replicate 2
OB	98.4275609	98.2556755
Cx	76.1719899	80.616479
Cer	99.0512897	98.9837387
BS	98.151548	98.3253956
Eye	52.6253965	36.476927
Hipp	55.0252365	50.3261549

Figure S3d

	Ctx		
Nrxn1+SS4	47.9969941	47.7335176	47.5698134
Nrxn2 +SS4	40.6625049	43.1159953	40.0250177
Nrxn3+SS4	76.8516497	78.4108513	75.755711

	Hipp		
Nrxn1+SS4	33.7922943	37.886894	36.777151
Nrxn2 +SS4	26.2854525	38.4577705	37.5427854
Nrxn3+SS4	48.9909823	56.023238	54.5863105

	OB			
Nrxn1+SS4	67.6337451	70.5328449	69.1133255	67.9828137
Nrxn2 +SS4	71.324379	75.829915	69.6024798	71.1623393
Nrxn3+SS4	91.2059826	94.8076694	93.8187561	83.5549349

Fieure S3e

Cell #	Cell Type	Nt Transporter	Cell #	% Total
1	GC-1 (a)	vGAT	1914	8.801618688
2	GC-2 (b)	vGAT	3608	16.59155707
3	GC-3 (c)	vGAT	273	1.255403293
4	GC-4 (d)	vGAT	234	1.076059968
5	GC-5 (e)	vGAT	1669	7.674974708
6	GC-6 (f)	vGAT	237	1.089855608
7	GC-7 (g)	vGAT	679	3.122413317
8	PGC-1 (h)	vGAT	1037	4.769863093
9	PGC-2 (i)	vGAT	377	1.733852188
10	PGC-3 (j)	vGAT	279	1.282994574
11	EPL-IN (k)	vGAT	181	0.740368044
12	MTC-1 (l)	vGLUT1	90	0.413869217
13	MTC-2 (m)	vGLUT2	116	0.533431436
14	MTC-3 (n)	vGLUT1	927	4.262852938
15	OSN (o)	n/a	1200	5.518256231
16	Transition (p)	n/a	2085	9.587970201
17	Immature (q)	n/a	3910	17.88031822
18	Astrocyte-Like (r)	n/a	2950	13.56571323
		Total	21746	

Cell Type	Nt Transporter	Cell #	% Total
GC-1 (a)	vGAT	1914	18.28429499
GC-2 (b)	vGAT	3608	34.46694689
GC-3 (c)	vGAT	273	2.607948032
GC-4 (d)	vGAT	234	2.235384028
GC-5 (e)	vGAT	1669	15.94382881
GC-6 (f)	vGAT	237	2.264042797
GC-7 (g)	vGAT	679	6.486434848
PGC-1 (h)	vGAT	1037	9.906381353
PGC-2 (i)	vGAT	377	3.601452044
PGC-3 (j)	vGAT	279	2.665265571
EPL-IN (k)	vGAT	181	1.538020634
Total		10468	

% Total	Class
82.2888804	GC
16.17309897	PGC
1.538020634	EPL IN

Figure S3g

Nrxn1a	Nrxn1beta	Nrxn1gamma	Nrxn2alpha	Nrxn2b	Nrxn3a	Nrxn3b
71.12621854	99.1914017	124.191117	173.743031	98.8759267	182.511533	13.3611674
64.126373	86.0375944	101.486104	163.942845	99.734682	188.953559	18.1534874

Figure S3h

	Nrxn1+SS4		Nrxn2+SS4		Nrxn3+SS4	
VGAT-Cre x Ribotag (IP)	87.7867892	84.518571 6	80.2605538	81.5170844	99.9998789	99.9998688
VGAT-Cre x Ribotag (Input)	75.8672742	77.7975766	68.0439768	70.835292	99.9998782	99.9998759

Figure S3i

aqp4	mbp	vgat	vglut1
1.32249151	2.5596993	216.084581	1.44791383
7.34345152	7.02640725	195.949886	8.31810714

Dag1-ex4/5	GRID1	GRID2	Nlgn1	Nlgn2	Nlgn3	LRRTM1	LRRTM2	LRRTM3	LRRTM4
74.55410775	79.1848698	13.262568	77.4629552	79.4991902	105.028284	10.6024128	113.412944	142.626714	110.915265
71.71963751	74.2983743	15.6517838	77.4660276	80.7797306	108.452086	18.6879369	95.7455801	132.564143	97.0570802

Cbln1	Cbln2	Cbln4	Nxph1	Nxph2	Nxph3	Nxph4
25.7730436	130.869255	2.9720944	151.823795	110.262673	89.4505852	43.5184137
28.9375895	116.048155	14.4385551	155.28374	116.068716	64.2376581	56.3486118

Car10	Car11	Fam19a1	Fam19a2	Fam19a4
91.7151355	46.4374026	2.96880737	81.8619855	31.934031
90.0590841	54.8881018	5.63161432	70.4320831	61.8198036

Sex Info
Male
Female

Figure S4B

	Nrxn1+SS2a			Nrxn1+SS2ab		
OB	23.7997239	32.2456529	20.9447097	11.424269	4.28671274	0.23111404
Cx	38.6745243	34.7919661	32.6795186	3.12952473	9.70502156	0.63396085
Cer	14.7599742	16.1028898	3.62182863	4.62608225	6.03811695	0.71319345
BS	33.5629296	30.8352376	19.5077275	5.56943315	2.21983864	0.58499756
Eye	32.7050069	26.1400815	17.3548094	9.99992312	6.08933698	0.40834846
Hipp	29.1816702	22.8044389	10.1076601	4.30128743	6.1536954	0.52101004

	Nrxn2+SS2a			Nrxn2+SS2ab		
OB	28.5094542	24.9017565	16.8172125	2.99925581	2.51822949	0.19718005
Cx	50.2571349	48.4946611	51.9543239	4.67542608	3.93138537	1.02817131
Cer	51.2400945	49.4457019	55.9551432	2.59825706	2.57927569	0.45553619
BS	54.5110411	51.6679932	61.893745	8.65015149	8.44922265	3.65726614
Eye	53.6427778	48.8971785	60.364578	3.17026886	2.93660837	0.85465117
Hipp	45.567049	41.4261587	42.0220875	4.3938154	6.47958282	1.69988516

	Nrxn3+SS2a				Nrxn3+SS2ab			
OB	5.07276223	5.40128113	5.34709904	5.5790284	2.30849049	3.03799968	3.02814074	3.69268352
Cx	15.9258123	14.125159	12.8265741	12.9826657	3.53341664	3.38457514	3.34298999	4.52252604
Cer	8.11731176	6.52477303	9.66149714	6.03572067	3.64586348	3.25371096	4.30462194	2.58195832
BS	8.12651131	7.38369428	5.50860295	9.64217042	3.1772718	3.2702236	0	1.61424267
Eye	37.1758201	37.9784824	38.3735894	38.77649	3.67178176	2.9743369	5.48200332	3.54929969
Hipp	5.36066559	4.7700174	5.1153688	4.93079022	2.35652561	2.08082157	2.81958056	2.26591836

Figure S4D

		SS2a				SS2ab			
	Cx	39.9950667	42.1953469	39.0558421		0	0	0	
	Hipp	27.4875702	24.4343891	21.4373855		0	0	0	
Nrxn1	OB	57.2913284	64.5729304	56.8186383		0	0	0	
	Cx	63.0087959	62.9662996	61.9267294		11.422138	9.65968671	9.32448298	
	Hipp	73.376578	71.9248309	71.5079088		9.19924087	10.1919125	10.2652807	
Nrxn2	OB	41.5851435	47.9350129	46.3446934		7.0133218	6.70929239	8.26908011	
	Cx	3.63741736	4.09779417	3.27640856		0.35578707	0.30367704	0.67152621	
	Hipp	9.46532216	7.23930484	4.65554447		4.72962029	3.67867693	5.25117864	
Nrxn3	OB	13.081799	16.7218649	23.4350967	12.9042225	2.6628382	5.83591231	11.1126736	9.62748256

Figure S4F

Nrxn1 SS2	SS2a			SS2ab		
VGAT-Cre x Ribotag (IP)	7.58603292	6.57230977		0.60663137	2.44736908	
VGAT-Cre x Ribotag (Input)	25.1040962	21.9707598		1.11325543	1.70680497	
Tbet-Cre x Ribotag (IP)	63.7294833	60.4917908	56.5329429	2.3343465	2.34476108	5.52393185
Tbet-Cre x Ribotag (Input)	27.4689148	28.2129902	25.0341771	3.15083653	2.00808639	7.02504851

Nrxn2 SS2	SS2a			SS2ab		
VGAT-Cre x Ribotag (IP)	16.035355	14.9702996		0.843909	0.90710201	
VGAT-Cre x Ribotag (Input)	21.1556895	22.2662653		1.09516642	0.77430731	
Tbet-Cre x Ribotag (IP)	61.2515835	55.9792982	63.7814723	6.51525502	4.98458378	5.74364792
Tbet-Cre x Ribotag (Input)	23.199189	19.5961182	19.8181309	1.11452616	1.12829991	1.46705286

Nrxn2 SS3	SS2a			SS2ab		
VGAT-Cre x Ribotag (IP)	0.60080094	0.97665756		0.000072646	0.25730406	
VGAT-Cre x Ribotag (Input)	1.40220641	1.48190368		0.36261927	0.25765162	
Tbet-Cre x Ribotag (IP)	55.7089527	51.7598605	55.5424997	2.23131301	2.14231923	2.56996727
Tbet-Cre x Ribotag (Input)	1.48844967	1.40992792	1.41884026	0.11742332	0.37446783	0.19516724

Figure S4G

	dCre	Cre	Cre + Nrxn3a (+SS1, -SS2)	Cre + Nrxn3a (-SS1, -SS2)	Cre + Nrxn3a (-SS1, +SS2a)	Cre + Nrxn3a (-SS1, +SS2ab)	Cre + Nrxn3a (+SS1, +SS2a)	Cre + Nrxn3a (+SS1, +SS2ab)
	0.569891			0.706300375				
	0.233139063			0.204014531				
	0.03281327			0.55805				
	0.193254391							
		0.006841523	0.040388504	0.063349227		0.005818364		0.007813666
		0.086078438	0.96045525	0.04229241		0.020161061		8.0533E-05
		0.013472939	0.7800825	0.182568141		0.009070908		0.002347791
		0.074814945	0.001605872	0.007378239		0.00520351		0.147032438
		0.017514301	0.008813113			0.005669896		0.093342164
								0.004548723
		0.021170223	0.033911367	0.099012883		0.05311916	0.120276438	
		0.073130563	0.039751164	0.043083043	0.007759813		0.120164445	
		0.007764755	0.044591875	0.013076548	0.003369775	0.021059115	0.453669906	
		0.016584412	0.018136447	0.141026453	0.053152191	0.009508304	0.077901055	
		0.004835541	0.02511891	0.10703257	0.174748313	0.08465243	0.248176781	
		0.099819359	0.096631766	0.199760594	0.240849906	0.545518375	0.036356422	0.399405781
	0.093480844	0.023086189	0.026287072	0.094621078	0.828672438	0.016489037	0.032917965	0.034142141
	0.456857438	0.046879367	0.787552063	0.469979406	0.185947969	0.036249195	0.512565844	0.01941476
		0.097105961	0.438977313	0.633015188	0.415111406	0.115724367	0.450303906	
		0.143756578	0.240514094				0.427999344	
	0.068554484				0.181880328		0.090869625	0.047667004
	0.075162414				0.065542117		0.120187227	0.079569156
	0.074576875				0.205911922		0.100152695	0.014909358
	0.239198188							0.145043359
Average	0.203692796	0.048857006	0.236187821	0.222785043	0.214813289	0.071403363	0.214733973	0.076562836
Count	10	15	15	16	11	13	13	13
Statistical Test	One-Way ANOVA with Dunnett's Multiple Comparison Test							
Significance		ns	ns	ns	ns	ns	ns	ns

Figure S4H

	dCre	Cre	Cre + Nrxn3a (-SS2, +SS4)	Cre + Nrxn3a (+SS2a, +SS4)	Cre + Nrxn3a (+SS2ab, +SS4)
	0.228151266	0.270493969			
	0.632447375	0.081538258			
	0.469092063	0.07242107			
	0.304565438	0.28847425			
	0.312269188	0.321017563			
			0.095012641	0.793223313	0.038284688
			0.784338625	0.127359453	0.228408781
			0.174334047	0.040040902	0.248709281
				0.01543212	0.317301281
	0.164052672	0.091610852	0.60800125	0.1570415	0.117128031
	0.93577825	0.110595063	0.257874609	0.205395828	0.039205551
	0.389883969	0.624779813	0.536665375	0.158192047	0.099106039
	0.267138469	0.112728047	0.628825188	0.243786016	0.085628391
	0.490128125	0.162505703	0.598339	0.565154438	0.196270875
	0.409490438	0.030569123	0.243040156	0.16094575	
	0.316334	0.08349718	0.314777625	0.098338031	0.085651383
		0.02063374	0.341420406	0.174690344	0.149125688
		0.01376566	0.824854125	0.042296313	0.069020094
			1.030536938	0.097620594	
Average	0.409944271	0.163187878	0.495232307	0.205679761	0.139486674
Count	12	14	13	14	12
Statistical Test	One-Way ANOVA with Dunnett's Multiple Comparison Test				
Significance		*, p = 0.011		*, p = 0.0446	**, p = 0.0068

Figure S4I

	dCre	Cre	Cre + Nrxn3a (-SS4)	Cre + Nrxn3a (LNS2/3-only)	Cre + Nrxn3a (LNS2-only)
		0.006038114		0.759377938	0.349821031
		0.034301043		0.07197793	1.752929875
		0.215116219		0.98268975	0.232681375
				0.623020563	0.247843141
				0.081284563	0.528363688
	0.040933578	0.676100313	0.085394891	0.880997063	0.375117031
	0.253019375	0.016212763	0.545715375	0.099553203	0.485550125
	0.735948875	0.097722383	0.03950193	0.145887094	0.222493031
	0.278015594	0.065696508	0.252600188	0.185638109	0.477250938
	0.61814575	0.155046531	0.141472875	0.173300422	
			0.211748391		
			1.002428063		
		0.345421094	0.391278156		
		0.008918974	0.546738563		
		0.056377566	0.145824328		
		0.108022813	0.358434875		
		0.014229912	0.023247305		
		0.012300916			
		0.198396063			
		0.040120508			
		0.033272973			
		0.007997512			
	0.8344835	0.212273719	0.363734531	0.147021609	1.15941675
	0.080197617	0.039506512	0.160035563	0.295032406	0.329454063
	0.36258625	0.039967867	0.134588969	0.32206275	0.266610469
	0.276471594	0.110030922	0.330427188	0.129477984	0.252036391
	0.436331	0.167885297	1.32554575	1.046698125	0.995378063
	0.488727375	0.019573406	0.098544648		
	0.083844281	0.027915848	0.543393313		
	0.243237906	0.015381745	0.077077031		
	0.187276766	0.122543922	0.054908414		
		0.013174115	0.912878		
Average	0.351372819	0.102126627	0.352069016	0.396267967	0.548210426
Count	14	28	22	15	14
Statistical Test	One-Way ANOVA with Dunnett's Multiple Comparison Test				
Significance		*, p = 0.0469	ns	ns	ns

Figure S4j

	dCre	Cre	Cre + Nrxn3a (-SS4)	Cre + Nrxn3a (deltaLNS1-EGF2)	Cre + Nrxn3a (deltaLNS5-LNS6)
	0.70574725	0.025854367	0.293816031	0.008608752	0.248454188
	0.261348391	0.016649018	0.163300688	0.048268961	0.107842938
	0.044233617	0.693520375	0.112910531	0.05135275	0.018739975
	0.36153275	0.226495172	0.184953078	0.186158359	0.568767813
		0.029888117	0.486453906	0.003417466	0.905099813
	0.421234344	0.004150544	0.453952344		0.100832352
	0.402312125	0.040636957	0.070376109	0.030526645	0.210022797
	0.240020766	0.021392611	0.466697781	0.050977512	0.037917664
	0.318077313	0.015197372	0.8036285	0.076578188	0.418372375
	0.941805813	0.01180463	0.024431449	0.054586637	0.280105156
	0.039975055	0.022097689		0.037625414	0.529729438
	0.101985688	0.083755789		0.096436031	0.141273797
	0.372174594	0.124188		0.018898256	0.345108094
	0.336703781	0.466572063		0.301472969	1.024519188
	0.585802438	0.097374922		0.004514382	0.188632875
Average	0.366639566	0.125305175	0.306052042	0.069244451	0.341694564
Count	14	15	10	14	15
Statistical Test	One-Way ANOVA with Dunnett's Multiple Comparison Test				
Significance		*, p = 0.0207	ns	**, p = 0.0037	ns

Figure S4k

	dCre	Cre	Cre + Nrxn3a (LNS2-only, -SS2)	Cre + Nrxn3a (LNS2-only, +SS2a)	Cre + Nrxn3a (LNS2-only, +SS2ab)
	0.516451844	0.399643563	0.825810438	0.279778969	0.187477984
	0.31208925	0.380795719	1.023200563	0.395768688	0.357884938
	1.33785525	0.396974313	0.532168188	0.086468313	0.454155063
	0.554088875		0.305869969	0.476970688	0.178738656
	0.512526906		0.466617281	0.504745938	0.5852615
	1.266085	0.011399637	0.849412563	0.027186744	0.033822902
	0.219318391	0.141984906	0.210171234	0.379162031	0.023802578
	0.426461813	0.216048313	0.494751188	0.085967398	0.018461205
				0.094952336	0.252259063
				0.176041641	0.097650125
	0.211821766	0.00890393	0.089310445	0.018858912	0.109565125
	0.359874344	0.000566914	0.038812066	0.073612805	0.045932152
				0.055196316	0.096226516
				0.031795727	0.134679813
					0.066377906
Average	0.571657344	0.194539662	0.483612393	0.191893322	0.176153035
Count	10	8	10	14	15
Statistical Test	One-Way ANOVA with Dunnett's Multiple Comparison Test				
Significance		*, p = 0.0122	ns	**, p = 0.0032	**, p = 0.0018

Sex info						
Male						
Female						

Figure S5b		Average	Count	Statistical Test	Significance
Gephyrin Size, Avg. Per Culture	dCre	0.207358906	5	One-Way ANOVA with Dunnett's Multiple Comparison Test	
	Cre	0.210395827	3		ns
	Cre + LNS2-SS2(-)	0.206538707	5		ns
	Cre + LNS2a/SS2ab	0.21191586	4		ns
Gephyrin Size, Pseudoreplicates	dCre	0.207020506	77	One-Way ANOVA with Dunnett's Multiple Comparison Test	
	Cre	0.210385812	44		ns
	Cre + LNS2-SS2(-)	0.206144217	75		ns
	Cre + LNS2a/SS2ab	0.211914099	57		ns
Synaptoporin Size, Avg. Per Culture	dCre	0.206043234	5	One-Way ANOVA with Dunnett's Multiple Comparison Test	
	Cre	0.209413227	3		ns
	Cre + LNS2-SS2(-)	0.213757592	5		ns
	Cre + LNS2a/SS2ab	0.19418001	4		ns
Synaptoporin Size, Pseudoreplicates	dCre	0.205999847	77	One-Way ANOVA with Dunnett's Multiple Comparison Test	
	Cre	0.209811725	44		ns
	Cre + LNS2-SS2(-)	0.213031978	75		ns
	Cre + LNS2a/SS2ab	0.19302512	57		*, p = 0.0490 (to dCre)

Figure S5c		Average	Count	Statistical Test	Significance
Capacitance	dCre	144.9868085	47	One-Way ANOVA with Tukey's Multiple Comparison Test (to dCre)	
	Cre	155.2536087	46		0.559
	Cre + LNS2-SS2(-)	156.2747727	44		0.208
	Cre + LNS2a/SS2ab	149.4508333	48		0.9024

Figure S5d		Average	Count	Statistical Test	Significance
Input Resistance	dCre	65.68085106	47	One-Way ANOVA with Tukey's Multiple Comparison Test (to dCre)	
	Cre	71.24130435	46		0.8789
	Cre + LNS2-SS2(-)	59.8	44		0.8641
	Cre + LNS2a/SS2ab	72.2875	48		0.8079

Figure S5e		Average	Count	Statistical Test	Significance
mIPSC rise time	dCre	1.442106167	18	One-Way ANOVA with Tukey's Multiple Comparison Test (to dCre)	
	Cre	1.510283	18		0.7491
	Cre + LNS2-SS2(-)	1.550786	18		0.3875
	Cre + LNS2a/SS2ab	1.598385611	18		0.1092
mIPSC decay time	dCre	6.662867944	18	One-Way ANOVA with Tukey's Multiple Comparison Test (to dCre)	
	Cre	7.255218444	18		0.0762
	Cre + LNS2-SS2(-)	6.708311444	18		0.9976
	Cre + LNS2a/SS2ab	7.078743389	18		0.319

[illegible]

Figure S5f

Male mIPSC Frequency			
dCre	Cre	Cre + Nrxn3a (LNS2-only -SS2)	Cre + Nrxn3a (LNS2-only +SS2)
	2.238584		3.280782
	2.625588		2.998381
	2.531171		5.656087
	1.931001		2.509022
	5.587882		3.14356
7.27338	1.321882	5.14865	
4.402726	1.081102	5.89494	
5.883599	5.729488	4.403482	
5.204376	6.150818	5.008673	
19.03614	5.440025	2.694169	
5.038824	2.558924	5.479813	
5.210758	2.402191	4.122657	
3.829075	0.683333	8.459068	
		7.697913	4.171934
		4.708068	3.80085
		10.81561	1.575429
		8.293754	0.88
		3.708399	1.958021
Average 6.98485975	3.098460692	5.879476615	2.5974066
Count 8	13	13	10
Statistical test One-Way ANOVA with Tukey's Multiple Comparison Test (to dCre)			
Significance	*, p = 0.0149 (to dCre)	ns, p = 0.8040	*, p = 0.0187 (to dCre)

Female mIPSC Frequency			
dCre	Cre	Cre + Nrxn3a (LNS2-only -SS2)	Cre + Nrxn3a (LNS2-only +SS2)
6.658381		5.891185	
3.157127		6.709773	
6.180941		11.09307	
5.694728		9.776605	
3.576517		3.209363	
			2.824992
			2.987367
			4.064391
			2.97506
			2.158424
			5.400035
			3.688889
			4.378105
17.42413	2.437031		
6.410996	4.50533		
11.74752	3.308155		
3.160973	2.197802		
4.803659	0.838285		
Average 6.9014972	2.6573206	7.2959992	3.559410375
Count 10	5	5	8
Statistical test One-Way ANOVA with Tukey's Multiple Comparison Test (to dCre)			
Significance	ns	ns	ns

0.183784163	0.211146081	0.197990092	0.213389571
0.213037779	0.200505051	0.200505051	0.183827376

0.191347639	0.193321859	0.194373065	0.164275921	0.188336806	0.160954392	0.174211864	0.197444353	0.182250618	0.18111001	0.174364583	0.186902486	0.194996232	0.200534591	0.215320357	0.201009615
0.215466908	0.213934859	0.209442478	0.236755824	0.229186047	0.226057143	0.22677685	0.220671296	0.224328969	0.20511542	0.20244898	0.203640974	0.19953168	0.204968553	0.189451396	
0.157251773	0.179982906	0.185318681	0.202928377	0.209718574	0.190882852	0.186388889	0.172352025	0.178948127	0.195550062	0.189519427	0.217258978	0.198884422	0.207254138	0.218145957	
0.210342531	0.225004625	0.225820567	0.229088748	0.216946939	0.219229358	0.219146552	0.211358457	0.204838113	0.23	0.242585445	0.221458154	0.229506276	0.215419847	0.22297911	

0.227182482	0.220769231	0.218337893	0.190242188	0.230773196	0.211110278	0.212663623	0.223508646	0.201063658	0.223184534	0.21497093	0.208955916	0.212822129	0.211447188	0.2054531
0.220650602	0.224528754	0.224761226	0.220357143	0.227048242	0.220988417	0.209338843	0.189812067	0.197096774	0.190194473	0.176787565	0.217193277	0.215473171	0.217488377	
0.210952762	0.206666667	0.220028736	0.2125	0.215171289	0.209284118	0.208047473	0.179661572	0.199334486	0.201447368	0.197527923	0.198761905	0.219418262	0.224573042	0.217428571
0.200193929	0.235520833	0.204694687	0.206590551	0.202112237	0.178521916	0.207689704	0.199395817	0.196896714	0.195043341	0.209765458	0.218315217	0.210599676		

0.188180645	0.172551963	0.180197368	0.17042836
0.180153584	0.171224784	0.171224784	0.153858521

0.219781086	0.221070111	0.23991433	0.195337972	0.204093264	0.179290123	0.191622912	0.222652361	0.217808216	0.206841629	0.215093046	0.208288557	0.238815094	0.209408503	0.233325021	0.22951278
0.250129496	0.258361732	0.21628572	0.251478473	0.248318519	0.235829139	0.216265825	0.197737478	0.241551155	0.236116208	0.214622568	0.2190131	0.233206997	0.242	0.234145937	
0.242462988	0.2116171	0.194854142	0.226491876	0.22160216	0.21064663	0.094924812	0.185298077	0.174471326	0.208226351	0.216481775	0.202898042	0.186978335	0.208804598	0.182697303	
0.202136259	0.200748848	0.172904074	0.159615846	0.16265	0.178213852	0.181423488	0.18230916	0.180159509	0.168958333	0.182369299	0.175829966	0.188361345	0.161885522	0.157037594	

0.197364729	0.213840231	0.225468393	0.248677966	0.245971429	0.222927046	0.218138862	0.255203549	0.227704778	0.213904939	0.196900085	0.189542254	0.219582367	0.243938507	0.207965797
0.18145749	0.216593977	0.230252427	0.204806825	0.207586702	0.220958549	0.172926094	0.162319392	0.179827094	0.1685337	0.201939328	0.190561798	0.193306773	0.155260736	
0.254768963	0.243642322	0.27783852	0.257278107	0.273060109	0.241460446	0.217329787	0.179385113	0.266998106	0.240016221	0.23863167	0.216965726	0.317393539	0.302068719	0.31992266
0.223445065	0.223763033	0.221958864	0.183446244	0.18133627	0.159663551	0.22243	0.224611973	0.200896774	0.208846154	0.246188159	0.273986063	0.250094178		

190.45	112.14	92.19	
173.28	160.92		
109.91	183.45	140.74	108.18
27.7	87.9	134	
31.9	38.2		
69.3	38.9	47.6	51.2

Sex Info
Male
Female

Figure 3Ai	dCre	Cre
	30.47	134
	207.4	148.18
	158.51	160.36
	188.33	162.26
	132.2	174
	182.46	188.8
	161.71	191.18
	92.7	194
	146.42	194.36
	166.69	195.1
Average	143.396	142.322
Count	10	10
Statistical Test	two-tailed unpaired parametric t-test	
t-value	0.08383	
df	18	
Significance	0.9341	

Figure 3Aii	dCre	Cre
	20.7	32
	26.3	41.3
	23	46.1
	20.2	47.2
	27.2	52
	26.3	56.4
	20.1	57.3
	21.3	69
	19.4	70.4
	21.8	74.4
Average	19.33	57.22
Count	10	10
Statistical Test	two-tailed unpaired parametric t-test	
t-value	0.9775	
df	18	
Significance	0.3413	

Figure 3Aiii	dCre	Cre
5	0.27288	0.0
10	0.24174	0.516105
20	0.19604	0.130604
30	0.141008	0.110105
40	0.10311	0.072105
60	0.1193	0.061367
70	0.08728	0.036605
100	0.101008	0.074605

dCre									
	5	10	20	30	40	60	70	100
5		0.000111	0.000009	0	0	0	0	0
10	0.000111		0.000605	0.016105	0.000105	0.000105	0.000105	0.000105
20	0.000009	0.000605		0.000001	0.000367	0.000367	0.000367	0.000367
30	0	0.016105	0.000001		0.000605	0.000605	0.000605	0.000605
40	0	0.000105	0.000367	0.000605		0.000367	0.000367	0.000367
60	0	0.000105	0.000367	0.000605	0.000367		0.000367	0.000367
70	0	0.000105	0.000367	0.000605	0.000367	0.000367		0.000367
100	0	0.000105	0.000367	0.000605	0.000367	0.000367	0.000367	

Cre									
	5	10	20	30	40	60	70	100
5		0.000367	0	0.000367	0	0.012105	0	0
10	0.000367		0.000605	0.000105	0.000367	0.000605	0.000367	0.000367
20	0	0.000605		0.000105	0.000367	0.000605	0.000367	0.000367
30	0.000367	0.000105	0.000105		0.000367	0.000605	0.000367	0.000367
40	0	0.000367	0.000367	0.000367		0.000367	0.000367	0.000367
60	0.012105	0.000605	0.000605	0.000605	0.000367		0.000367	0.000367
70	0	0.000367	0.000367	0.000367	0.000367	0.000367		0.000367
100	0	0.000367	0.000367	0.000367	0.000367	0.000367	0.000367	

	dCre	Cre
Average	0.05221	0.059083662
Count	10	10
Statistical Test		
t-value	0.0903269	0.081551227
df	10	10
Significance	0.2954236	0.121302483
	0.5911389	0.411746349
	1.01534482	0.898045932
	1.1688441	0.935679156
	1.3196497	1.268455139
	1.4772431	1.180456479

Statistical Test	Significance
	>0.0669
	>0.0669
	>0.0669
Two-way ANOVA with Bonferroni Multiple comparisons test at each stimulus intensity (dCre vs. Cre: p value=0.5686)	>0.0669
	>0.0669
	>0.0669
	>0.0669
	>0.0669
	>0.0669

Figure 3Aiv	dCre	Cre
	12.02138	15.4208217
	12.02008	19.2847
	7.1838	20.92009
	15.41728	16.29609
	6.867359	14.67197
	7.1323	7.934853
	17.02004	15.8697
	14.10207	25.33675
	6.28798	8.972759
	15.71982	19.07797
Average	10.6203033	16.8083862
Count	10	10
Statistical Test	two-tailed unpaired parametric t-test	
t-value	0.2716	
df	18	
Significance	0.7545	

Figure 3Av	iPSC Rizo dCre	iPSC Rizo Cre
	1.684167	2.03015825
	1.860002	1.852142
	2.06296	1.55925
	1.872083	1.827177
	1.204861	1.38042
	1.867257	1.67663
	2.094917	2.02925
	1.861667	1.248889
	2.017188	2.111771
	1.72247	1.854108
Average	1.9485214	1.82867718
Count	10	10
Statistical Test	two-tailed unpaired parametric t-test	
t-value	0.1773	
df	18	
Significance	0.8613	

Figure 3Av	iPSC Dorsin dCre	iPSC Dorsin Cre
	16.7861	16.78602025
	16.8007	16.8003
	15.8861	15.8859
	16.2083	16.2082
	15.2292	16.6252
	17.6108	15.2896
	16.6917	16.6116
	17.8278	16.8278
	16.4252	16.6178
	16.2008	16.2008
Average	16.6309191	16.7484803
Count	10	10
Statistical Test	two-tailed unpaired parametric t-test	
t-value	0.1126	
df	18	
Significance	0.894	

Figure 3Avi	CQ dCre	CQ Cre
	0.268279	0.3127208
	0.268252	0.268208
	0.267279	0.267279
	0.267267	0.268208
	0.268208	0.268267
	0.268208	0.268208
	0.268279	0.268267
	0.268208	0.268279
	0.267279	0.31208
	0.268267	0.268279
Average	0.2765079	0.2979759
Count	10	10
Statistical Test	two-tailed unpaired parametric t-test	
t-value	0.5622	
df	18	
Significance	0.5859	

Figure 3Avii	PPR dCre	PPR Cre
	0.8	0.8
20	0.80756	0.88608
80	0.757198	0.897887
200	0.768268	0.757197
800	0.768268	0.767268

dCre									
	0.8	20	80	200	800
0.8		1.527669	0.742609	0.788277	0.808009
20	1.527669		0.000605	0.000105	0.000105
80	0.742609	0.000605		0.016105	0.000105
200	0.788277	0.000105	0.016105		0.000367
800	0.808009	0.000105	0.000105	0.000367	

Cre									
	0.8	20	80	200	800
0.8		0.000367	0.000605	0.000367	0.000367
20	0.000367		0.000105	0.000367	0.000367
80	0.000605	0.000105		0.000367	0.000367
200	0.000367	0.000367	0.000367		0.000605
800	0.000367	0.000367	0.000367	0.000605	

	dCre Average	Count	Cre Average	Count	Statistical Test	Significance
	0.7818497	10	0.779346578	10		>0.0669
	0.8011238	10	0.692392087	10	Two-way ANOVA with Bonferroni Multiple comparisons test at each PPR interval (dCre vs. Cre: p value=0.9825)	>0.0669
	0.8207512	10	0.682247774	10		>0.0669
	0.7425482	10	0.767780679	10		>0.0669

Sex Info
Male
Female

Figure 57c

	IPSC Amplitudes			
	dCre	Cre	Cre+Ms3a (IB4)	Cre+Ms3a (LNB2-B3D-)
	7100.387818	8401.379885	8187.047962	4653.089369
	3455.984102	5113.756027	7921.790316	9764.284876
	7267.992202	7913.910381	4392.328172	7626.996026
	7099.714844	3969.011123	9839.75	13725.99199
	9786.54834	7827.148016	7623.238074	8460.284961
		3372.723198		3.987715
	8994.273638	9547.77002	6744.230887	9362.243164
	8789.189877	10210.83008	6635.423562	8087.851772
	9663.928771	3489.284012	4968.172363	9276.979027
	8398.698477	8772.75293	13862.46191	8769.303711
	8084.403926	8798.903906	9926.291016	8076.444289
		387.549969		0.09966016
	8266.347656	6726.435776	6443.246023	12992.1377
	9672.762227	6046.296087	10820.80664	11023.79725
	11876.01172	3261.466962	12035.37031	10215.14363
	8487.003805	3876.768014	6422.977539	8030.200378
	8187.066449	8339.413086	9139.388164	9464.401963
Average	7940.261739	6891.647609	7588.787668	8326.164291
Count	19	17	19	16
Statistical Test	One-Way ANOVA with Dunnett's Multiple Comparison Test			
Significance		***, p < 0.0021	ns, p < 0.9996	ns, p < 0.9992

	IPSC Charge			
	dCre	Cre	Cre+Ms3a (IB4)	Cre+Ms3a (LNB2-B3D-)
	0.698513075	0.9809415	0.54348375	0.466371281
	0.219178421	0.529613895	1.012981625	0.472628398
	0.5013625	0.198168261	0.376316031	0.664229175
	0.937503038	0.867138625	0.389520375	1.054636699
	0.930207313	0.223788969	1.026138313	0.489197875
		0.3973175		
	1.196625	0.731439898	0.499377063	0.363798625
	1.677697375	1.172625	1.112642625	0.389312599
	2.451947	0.451798663	0.79191775	0.457737313
	0.569664813	1.299196625	1.04638	1.664589375
	1.5971325	0.484931156	1.408996625	1.399582575
		0.09966016		
	0.74435375	0.622455313	0.537093313	1.3647186
	1.426935625	0.49896705	1.491798	1.695812
	1.13425625	0.400902843	1.39887	2.13147775
	1.775356875	0.3455625	1.872382375	1.19852
	0.932966963	0.547598813	0.848784438	1.372993875
Average	1.126296634	0.583361656	0.931389819	1.033787102
Count	19	17	19	16
Statistical Test	One-Way ANOVA with Dunnett's Multiple Comparison Test			
Significance		**, p < 0.0035	ns, p < 0.9578	ns, p < 0.8877

			Average	Count	Statistical Test	Significance
Figure 57c		dCre	177.0909091	22	one-way ANOVA with Tukey's Multiple comparisons test	ns, 0.9964 (to dCre)
		Cre	174.1818182	22		ns, 0.7492 (to dCre)
		Cre + LNB2-B3D-	160.5909091	22		ns, 0.7492 (to dCre)
Figure 57d		dCre	117.6363636	22	one-way ANOVA with Tukey's Multiple comparisons test	ns, 0.8670 (to dCre)
		Cre	130.0454545	22		
		Cre + LNB2-B3D-	110.0909091	22		ns, 0.9997 (to dCre)
Figure 57e	mIPSC rise time	dCre	0.659462364	22	one-way ANOVA with Tukey's Multiple comparisons test	ns, 0.1737 (to dCre)
		Cre	1.103573864	22		
		Cre + LNB2-B3D-	1.091553	22		ns, 0.2346 (to dCre)
	mIPSC decay time	dCre	6.539121	22	one-way ANOVA with Tukey's Multiple comparisons test	ns, 0.6028 (to dCre)
		Cre	8.772316227	22		
		Cre + LNB2-B3D-	8.408139773	22		ns, 0.8980 (to dCre)

	Datapoints																						
	142	246	174	173	162	173	223	177	117	102	109	208	193	161	200	116	165	156	143	321	223	192	
	162	185	115	183	138	169	147	170	127	107	119	129	224	227	198	236	223	216	205	211	186	116	
	160	200	270	220	202	181	215	186	97	109	127	201	161	160	239	227	270	115	206	229	193	198	
	101	117	174	71	112	90	58	82	117	244	127	69	78	69	91	298	146	127	128	72	113	104	
	125	155	211	102	99	71	193	108	261	197	88	126	155	113	69	98	67	89	73	213	121	197	
	74	84	57	68	115	177	75	145	76	119	106	47	169	158	104	85	118	145	57	68	103	180	
	0.701497	1.225913	1.274851	0.703576	0.930317	0.844272	0.773855	0.986055	0.614388	0.76592	0.977216	0.758013	0.65835	0.871558	0.955236	1.583391	0.939874	0.915521	0.822711	1.202824	1.224807	1.110267	
	1.321946	0.932409	1.284161	1.342092	0.990115	1.479891	1.112727	1.376135	1.224238	1.106856	0.961521	0.903839	0.622507	0.932223	0.924354	1.165627	1.061719	1.202099	1.203101	1.143357	1.035013	0.933579	
	0.88892	0.703754	0.915425	1.211389	1.119476	1.317394	1.151329	0.916173	0.995325	0.955567	1.207613	0.811904	1.050443	1.20025	0.941055	1.499967	1.339693	1.049283	0.964139	0.865891	1.244015	1.033896	
	6.538458	6.665049	6.742647	5.439454	7.093215	7.753745	5.649893	6.176638	5.039422	5.738988	6.150865	6.03246	7.377802	5.918766	5.863177	6.843042	7.977806	5.445564	6.317698	5.667386	6.921464	7.456501	
	8.314991	7.379869	6.915726	6.503527	9.728236	9.083656	9.626654	9.99045	6.586127	8.425373	7.022174	6.007778	8.785942	7.442647	9.694179	7.739469	6.59808	7.528832	7.54563	7.966435	9.521329	7.404601	
	5.964077	6.392012	7.419133	6.375872	7.299999	8.264538	8.654402	5.735638	7.046851	6.159317	6.60752	6.109668	5.43112	6.52221	9.172896	6.292316	7.773923	6.83968	5.968496	8.707858	8.627596	6.815	

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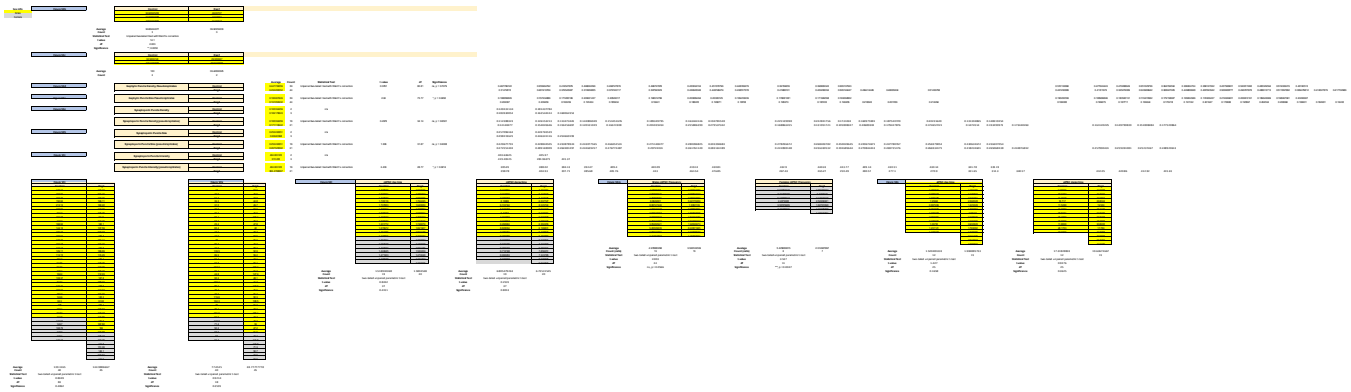
	Sex Info	2 males, 1 female	female	female
Figure S8e	% Gephyrin with Dystroglycan (avg. per animal)	10"	20"	O/N
		36.4929513	26.5676373	5.69961144
		20.72548408		
		25.93236631		
	Average	27.7169339	26.5676373	5.69961144
	Count	3	1	1

Figure S8f		10"	20"	O/N
	Gephyrin Size with Dystroglycan (avg. per animal)	0.048988203	0.047410739	0.038281746
		0.043506626		
		0.049433426		
	Average	0.047309418	0.047410739	0.038281746
	Count	3	1	1

		10"	20"	O/N
	Gephyrin Size without Dystroglycan (avg. per animal)	0.027810297	0.017452976	0.017541977
		0.021896803		
		0.019119668		
	Average	0.022942256	0.017452976	0.017541977
	Count	3	1	1

		10"	20"	O/N
Figure S8g	Dystroglycan Puncta Size (avg. per animal)	0.023284233	0.015653814	0.009445584
		0.018735656		
		0.016995115		
	Average	0.019671668	0.015653814	0.009445584
	Count	3	1	1



0.5242.0000	0.1.0017.7.7.0	0.5.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.1.7.0.0.0.0.0	0.0.0.0.7.0.0.0	0.0.0.0.0.7.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.7.7	0.1.0.7.7.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0
0.0.0.0.7.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.7.0.0.0	0.0.0.0.7.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.0.0.0.0.0.0.0
0.0.0.7.0.0.0.0	0.7.0.0.0.0.0.0	0.7.0.0.0.0.0.0	0.0.0.7.0.0.0.0	0.7.0.0.0.0.0.0	0.7.0.0.0.0.0.0	0.0.0.0.7.0.0.0	0.7.0.0.0.0.0.0	0.7.0.0.0.0.0.0	0.0.0.0.0.0.0.0	0.7.0.0.0.0.0.0	0.7.0.0.0.0.0.0	0.0.0.0.7.0.0.0	0.7.0.0.0.0.0.0	0.7.0.0.0.0.0.0

Sex Info
Male
Female

Figure S10a

Capacitance	
Control	Dox1
117.98	127.54
156.18	156.8
147.57	154.15
82.21	92.95
100.44	107.11
112.95	173.51
123.4	177.5
210.61	142.93
139.11	192.79
135.17	103.95
151.94	162.33
110.33	165.29
139.31	114.04
181.98	170.55
112.81	152.06
151.12	134.87
191.95	188.21
109.78	94.89
139.4	180.94
134.86	126.56
163.45	116.3
163.45	150.05
188.33	171.43
133.39	133.05
111.83	190.05
189.07	159.17
137.7	144.51
208.98	194.89
133.01	183.4
89.79	150.07
174.88	174.81
173.98	201.79
159.43	166.66
112.28	172.76
	145.17
	111.81
	189.8

Average	140.4955882	144.2858757
Count (cells)	34	37
Statistical Test	two-tailed unpaired parametric t-test	
t-value	0.5149	
df	69	
Significance	0.6063	

Figure S10b

Input Resistance	
Control	Dox1
37.8	59.9
50	44.8
98	63
260.9	279
151.5	52.5
54.1	51.1
41.3	32.8
40.8	40.2
66.1	62.4
55.4	103.8
50.4	57.6
58	89
50.1	67.9
45.9	38.8
114.1	110.8
49.7	68
34	54.4
66.1	312
43.2	40.4
54.7	27
41.5	65.3
49.5	58.5
36.7	48.5
85.9	52.6
39.9	35
49.1	49.8
45.4	43.1
62.9	54.9
81.2	43.7
36.1	54.6
57.3	84.4
53.3	29.6
158.7	26.1
50.4	43.7
	78.4
	100.9
	33

Average	67.1	72.05135135
Count (cells)	34	37
Statistical Test	two-tailed unpaired parametric t-test	
t-value	0.3848	
df	69	
Significance	0.7016	

Figure S10c

mIPSC rise time	
Control	Dox1
1.362424484	1.30950844
1.088966135	1.319852573
1.284669884	1.182745905
1.297952138	1.294505951
1.271107356	1.203337881
1.320662213	1.195904547
1.272749327	1.692846872
1.745958937	1.683948115
1.777788165	1.651748027
1.684640158	1.570332609
1.496806859	1.503380441
1.151133271	1.291459961
1.668072376	1.673154138
1.693656313	1.655527576
1.751772791	1.30984545
1.538594913	1.96021188
1.444442439	1.824515936
1.507398854	1.814723013
1.693730533	1.653807484
1.142970176	1.543313943
1.5627735	1.745861585
	1.854664947
	1.245897711

Average	1.513616335	1.537775449
Count (cells)	22	24
Statistical Test	two-tailed unpaired parametric t-test	
t-value	0.3625	
df	44	
Significance	0.7187	

mIPSC decay time

Control	Dox1
3.742149	6.797306
5.884112	5.58566
8.524862	8.685007
7.19773	5.809896
7.192756	6.69773
5.852364	7.039238
7.114739	6.865286
5.375713	5.779535
7.493984	5.245879
4.560751	5.949423
4.32016	7.666673
7.859943	4.989019
8.591355	5.640791
6.964987	6.967269
8.174805	7.420681
7.073388	5.505569
7.992705	8.445705
5.44497	6.58809
6.874834	7.019008
6.872432	5.974571
4.23732	6.236966
6.065148	5.691186
	5.8394
	4.97106

Average	6.507934591	6.518381
Count (cells)	22	24
Statistical Test	two-tailed unpaired parametric t-test	
t-value	0.04763	
df	44	
Significance	0.9622	

Figure S10d

Capacitance	
Control	Dox1
126	146
190	195
120	189
156	118
131	170
127	144
172	151
161	118
186	183
98	202
97	90
151	161
146	138
202	172
191	228
192	171
201	187
246	192
122	213
161	187

Average	162.95	167.35
Count (cells)	20	20
Statistical Test	two-tailed unpaired parametric t-test	
t-value	0.3301	
df	38	
Significance	0.7431	

Figure S10e

Input Resistance	
Control	Dox1
146	36
97	74
130	74
189	132
118	76
130	69
180	193
122	107
98	163
207	182
218	153
92	98
196	229
52	89
125	96
192	191
60	82
51	72
148	98
136	157

Average	133.85	115
Count (cells)	20	20
Statistical Test	two-tailed unpaired parametric t-test	
t-value	1.227	
df	38	
Significance	0.2276	

Figure S10f

mIPSC rise time	
Control	Dox1
0.954227	0.937273
0.824172	0.902034
0.914176	0.937832
0.860567	0.925969
0.889429	0.958437
0.950239	1.087246
1.39087	1.190048
1.32415	1.054884
0.772515	0.952238
0.859757	0.947932
0.84176	0.75997
0.769461	1.116668
0.725804	1.045168
0.889778	0.819897
1.016856	1.230938
0.868834	1.181207
0.854651	1.138133
0.750974	0.931749
0.820165	1.259818
1.004295	1.248777

Average	0.89772585	0.9929876
Count (cells)	20	20
Statistical Test	two-tailed unpaired parametric t-test	
t-value	1.699	
df	38	
Significance	0.0976	

mIPSC decay time

Control	Dox1
4.172868	7.341187
6.308469	7.230678
4.864474	7.930026
7.893928	8.120573
6.537705	7.72916
6.168713	7.87321
7.29887	8.538755
6.884544	8.345988
7.067439	7.89644
7.918895	7.189419
7.213615	7.794027
5.513385	7.938652
5.607075	7.42666
6.014364	7.31487
7.754037	6.787562
7.893223	7.913696
6.176741	7.497039
6.116704	8.910266
7.421533	7.88838
4.180111	8.888077

Average	6.721812005	7.427533845
Count (cells)	20	20
Statistical Test	two-tailed unpaired parametric t-test	
t-value	3.519	
df	38	
Significance	0.0011	

Figure S10e

eIPSC rise time	
Control	Dox1
1.023431	0.924008
0.921227	2.047187
2.07507	1.951419
2.020818	0.935952
0.69137	0.91791
0.694102	1.454211
0.742992	1.350907
1.030900	1.212862
1.02696	0.931413
0.624105	0.795403
1.040505	2.18898
0.781017	0.920034
0.711506	0.862882
0.701860	1.198773
	1.185313
	0.836453
	0.921922

Average	1.009382429	1.176914471
Count (cells)	14	17
Statistical Test	two-tailed unpaired parametric t-test	
t-value	1.014	
df	29	
Significance	0.319	

eIPSC decay time

Control	Dox1
18.39748	17.4509
13.38602	14.30664
14.2665	11.21818
16.44689	18.64398
12.18613	10.1811
17.25031	17.45168
19.39172	27.41401
15.50835	13.86055
15.89128	16.14258
11.92298	14.15951
11.38664	10.08274
9.277852	14.54645
9.743873	11.00477
8.657164	12.65497
	16.30173
	15.5855
	13.75872

Average	12.32541779	14.54535294
Count (cells)	14	17
Statistical Test	two-tailed unpaired parametric t-test	
t-value	2.18	
df	29	
Significance	0.0375	