

FIGURE 1:

Density of Gephyrin ⁺ clusters in 1 st order dendrites of adult-born DGCs					
KRUSKAL-WALLIS TEST					
Fig 1G	df		K	p	
		4 / 140		76.08	<.001
	1w	2w	3w	4w	8w
1w	--	0.72	<.001	<.001	<.001
2w	>.999	--	<.001	<.001	0.003
3w	<.001	<.001	--	>.999	>.999
4w	<.001	<.001	>.999	--	0.383
8w	<.001	0.003	>.999	0.383	--

Density of Gephyrin ⁺ clusters in 2 nd order dendrites of adult-born DGCs					
KRUSKAL-WALLIS TEST					
Fig 1G	df		K	p	
		4 / 141		94.37	<.001
	1w	2w	3w	4w	8w
1w	--	>.999	<.001	<.001	<.001
2w	>.999	--	<.001	<.001	<.001
3w	<.001	<.001	--	>.999	>.999
4w	<.001	<.001	>.999	--	>.999
8w	<.001	<.001	>.999	>.999	--

Density of Gephyrin ⁺ clusters in 3 rd order dendrites of adult-born DGCs					
KRUSKAL-WALLIS TEST					
Fig 1G	df		K	p	
		4 / 150		108.8	<.001
	1w	2w	3w	4w	8w
1w	--	0.796	<.001	<.001	<.001
2w	0.796	--	<.001	<.001	<.001
3w	<.001	<.001	--	>.999	>.999
4w	<.001	<.001	>.999	--	>.999
8w	<.001	<.001	>.999	>.999	--

Density of Gephyrin ⁺ clusters in 4 th order dendrites of adult-born DGCs				
KRUSKAL-WALLIS TEST				
Fig 1G	df	K	p	
		3 / 123	63.73	<.001
	2w	3w	4w	8w
2w	--	<.001	<.001	<.001
3w	<.001	--	0.018	0.039
4w	<.001	0.018	--	>.999
8w	<.001	0.039	>.999	--

Density of Gephyrin ⁺ clusters in 5 th order dendrites of adult-born DGCs				
KRUSKAL-WALLIS TEST				
Fig 1G	df	K	p	
		3 / 122	68.94	<.001
	2w	3w	4w	8w
2w	--	<.001	<.001	<.001
3w	<.001	--	0.017	0.294
4w	<.001	0.017	--	>.999
8w	<.001	0.294	>.999	--

Density of Gephyrin ⁺ clusters in the soma of adult-born DGCs					
KRUSKAL-WALLIS TEST					
Fig 1H	df		K	p	
	4 / 155		41.2	<.001	
	1w	2w	3w	4w	8w
1w	--	>.999	<.001	<.001	0.021
2w	>.999	--	0.002	<.001	0.129
3w	<.001	0.002	--	>.999	>.999
4w	<.001	<.001	>.999	--	0.426
8w	0.021	0.129	>.999	0.426	--

Density of Gephyrin ⁺ clusters in the axon of adult-born DGCs					
KRUSKAL-WALLIS TEST					
Fig 1I	df		K	p	
	4 / 146		75.53	<.001	
	1w	2w	3w	4w	8w
1w	--	>.999	<.001	<.001	<.001
2w	>.999	--	0.001	<.001	<.001
3w	<.001	0.001	--	0.014	>.999
4w	<.001	<.001	0.014	--	0.084
8w	<.001	<.001	>.999	0.084	--

Area of Gephyrin ⁺ clusters in 1 st order dendrites of adult-born DGCs					
KRUSKAL-WALLIS TEST					
Fig 1J	df		K	p	
	4 / 85		27.25	<.001	
	1w	2w	3w	4w	8w
1w	--	>.999	0.512	>.999	>.999
2w	>.999	--	<.001	0.364	0.88
3w	0.512	<.001	--	0.005	0.01
4w	>.999	0.364	0.005	--	>.999
8w	>.999	0.88	0.01	>.999	--

Area of Gephyrin ⁺ clusters in 2 nd order dendrites of adult-born DGCs					
KRUSKAL-WALLIS TEST					
Fig 1J	df		F	p	
	4 / 95		35.95	<.001	
	1w	2w	3w	4w	8w
1w	--	>.999	0.033	>.999	0.503
2w	>.999	--	<.001	>.999	0.069
3w	0.033	<.001	--	<.001	0.347
4w	>.999	>.999	<.001	--	0.1
8w	0.503	0.069	0.347	0.1	--

Area of Gephyrin ⁺ clusters in 3 rd order dendrites of adult-born DGCs					
KRUSKAL-WALLIS TEST					
Fig 1J	df		F	p	
	4 / 104		38.46	<.001	
	1w	2w	3w	4w	8w
1w	--	>.999	0.115	0.974	>.999
2w	>.999	--	<.001	0.033	0.172
3w	0.115	<.001	--	0.008	<.001
4w	0.974	0.033	0.008	--	>.999
8w	>.999	0.172	<.001	>.999	--

Fig 1J	Area of Gephyrin ⁺ clusters in 4 th order dendrites of adult-born DGCs			
	KRUSKAL-WALLIS TEST			
	df	K	p	
	3 / 113	55.79	<.001	
	2w	3w	4w	8w
2w	--	<.001	<.001	0.008
3w	<.001	--	<.001	<.001
4w	<.001	<.001	--	>.999
8w	0.008	<.001	>.999	--

Fig 1J	Area of Gephyrin ⁺ clusters in 5 th order dendrites of adult-born DGCs			
	KRUSKAL-WALLIS TEST			
	df	K	p	
	3 / 106	45.76	<.001	
	2w	3w	4w	8w
2w	--	<.001	<.001	0.007
3w	<.001	--	0.368	0.001
4w	<.001	0.368	--	0.442
8w	0.007	0.001	0.442	--

Fig 1K	Area of Gephyrin ⁺ clusters in the soma of adult-born DGCs				
	KRUSKAL-WALLIS TEST				
	df	K		p	
	4 / 131	38.08		<.001	
	1w	2w	3w	4w	8w
1w	--	0.895	<.001	>.999	0.002
2w	0.895	--	<.001	>.999	0.282
3w	<.001	<.001	--	<.001	>.999
4w	>.999	>.999	<.001	--	0.134
8w	0.002	0.282	>.999	0.134	--

Fig 1L	Area of Gephyrin ⁺ clusters in the axon of adult-born DGCs				
	KRUSKAL-WALLIS TEST				
	df	K		p	
	4 / 123	28.55		<.001	
	1w	2w	3w	4w	8w
1w	--	0.997	0.886	>.999	0.056
2w	0.997	--	0.002	0.669	>.999
3w	0.886	0.002	--	0.378	<.001
4w	>.999	0.669	0.378	--	0.016
8w	0.056	>.999	<.001	0.016	--

FIGURE 2:

Fig 2A		Density of Gephyrin ⁺ clusters in 1 st order dendrites of adult-born DGCs					INTER-SUBJECT EFFECT		
		Two-way ANOVA					Age		
		GSK-3-OE					df	F	p
		1w	2w	3w	4w	8w	4 / 292	59.230	<.001
WT	1w	>.999	>.999	<.001	<.001	<.001	Genotype		
	2w	>.999	>.999	0.007	<.001	<.001	df	F	p
	3w	<.001	<.001	0.628	0.007	0.231	1 / 292	4.01	0.046
	4w	<.001	<.001	0.019	0.377	0.976	Age*Genotype		
	8w	<.001	<.001	>.999	<.001	0.006	df	F	p
						4 / 292	5.118	<.001	

Fig 2B		Density of Gephyrin ⁺ clusters in 2-5 th order dendrites of adult-born DGCs					INTER-SUBJECT EFFECT		
		Two-way ANOVA					Age		
		GSK-3-OE					df	F	p
		1w	2w	3w	4w	8w	4 / 1067	297.200	<.001
WT	1w	>.999	0.276	<.001	<.001	<.001	Genotype		
	2w	0.097	0.999	<.001	<.001	<.001	df	F	p
	3w	<.001	<.001	0.026	<.001	0.027	1 / 1067	4.932	0.027
	4w	<.001	<.001	<.001	>.999	0.988	Age*Genotype		
	8w	<.001	<.001	<.001	>.999	0.982	df	F	p
						4 / 1067	1.674	0.154	

Fig 2D		Colocalization between Basson and Gephyrin	
		Mann Whitney test	
		U	p
WT vs GSK-3-OE		1144	0.004

Fig 2E		Percentage adult-born DGCs surrounded by PV ⁺ interneurons		
		Chi-square		
		df	z	p
WT vs GSK-3-OE		1 / 13.13	3.623	<.001

Fig 2G		PV ⁺ area surrounding Gephyrin ⁺ clusters in the soma of adult-born DGCs					INTER-SUBJECT EFFECT		
		Two-way ANOVA					Age		
		GSK-3-OE					df	F	p
		1w	2w	3w	4w	8w	4 / 655	9.041	<.001
WT	1w	0.204	<.001	0.228	0.656	0.009	Genotype		
	2w	>.999	<.001	<.001	<.001	<.001	df	F	p
	3w	0.015	<.001	0.853	0.996	0.198	1 / 655	18.820	<.001
	4w	<.001	0.085	>.999	0.972	>.999	Age*Genotype		
	8w	0.018	<.001	0.621	0.963	0.059	df	F	p
						4 / 655	18.590	<.001	

Fig 2H		Intensity of Lectin in PNNs surrounding PV interneurons	
		Mann Whitney test	
		U	p
WT vs GSK-3-OE		11	0.009

Fig 2I		Intensity of Aggrecan in PNNs surrounding PV interneurons		
		Student t- Test		
		t	df	p
WT vs GSK-3-OE		5.021	15	<.001

FIGURE 3:

Fig 3E	Frequency of mPSCs in developmentally generated and 8-week-old adult-born DGCs of WT and GSK-3 β -OE mice			INTER-SUBJECT EFFECT		
	Two-way ANOVA			Cell age		
	GSK-3-OE			df	F	p
				1 / 41	2.024	0.1624
WT	Embryonic	Adult		Genotype		
Embryonic	>0.9999	--		df	F	p
Adult	--	>0.9999		1 / 41	0.4897	0.488
				Age*Genotype		
				df	F	p
				1 / 41	0.0418	0.839

Fig 3F	Amplitude of mPSCs in developmentally generated and 8-week-old adult-born DGCs of WT and GSK-3 β -OE mice			INTER-SUBJECT EFFECT		
	Two-way ANOVA			Cell age		
	GSK-3-OE			df	F	p
				1 / 41	0.091	0.7641
WT	Embryonic	Adult		Genotype		
Embryonic	0.4023	--		df	F	p
Adult	--	0.0406		1 / 41	6.683	0.0134
				Age*Genotype		
				df	F	p
				1 / 41	0.438	0.5119

Fig 3G	Slope of mPSCs in developmentally generated and 8-week-old adult-born DGCs of WT and GSK-3 β -OE mice			INTER-SUBJECT EFFECT		
	Two-way ANOVA			Cell age		
	GSK-3-OE			df	F	p
				1 / 41	0.025	0.8748
WT	Embryonic	Adult		Genotype		
Embryonic	0.7579	--		df	F	p
Adult	--	0.0221		1 / 41	5.993	0.0187
				Age*Genotype		
				df	F	p
				1 / 41	1.280	0.2645

Fig 3H	AIS Length			INTER-SUBJECT EFFECT		
	Two-way ANOVA			Age		
	GSK-3-OE			df	F	p
				2 / 166	17.940	<.001
WT	2w	4w	8w	Genotype		
2w	0.022	>.999	>.999	df	F	p
4w	<.001	0.026	0.005	1 / 166	47.110	<.001
8w	<.001	<.001	<.001	Age*Genotype		
				df	F	p
				2 / 166	2.085	0.128

Fig 3I	AIS Starting point			INTER-SUBJECT EFFECT		
	Two-way ANOVA			Age		
	GSK-3-OE			df	F	p
				2 / 167	1.940	0.147
WT	2w	4w	8w	Genotype		
2w	0.373	0.909	0.17	df	F	p
4w	0.073	0.385	0.016	1 / 167	11.620	<.001
8w	0.569	0.985	0.33	Age*Genotype		
				df	F	p
				2 / 167	0.0268	0.974

Fig 3N	Colocalization between GFP and Syn in CA3 MFTs			INTER-SUBJECT EFFECT		
	Two-way ANOVA			Age		
				df	F	p
				2 / 98	27.960	<.001
WT	GSK-3-OE			Genotype		
	2w	4w	8w	df	F	p
				1 / 98	3.688	0.058
2w	>.999	0.035	<.001	Age*Genotype		
4w	0.845	0.238	<.001	df	F	p
8w	<.001	0.867	0.832	2 / 98	1.181	0.311

Fig 3O	Colocalization between GFP and Syn in CA2 MFTs			INTER-SUBJECT EFFECT		
	Two-way ANOVA			Age		
				df	F	p
				2 / 65	24.100	<.001
WT	GSK-3-OE			Genotype		
	2w	4w	8w	df	F	p
				1 / 65	12.52	<.001
2w	0.992	<.001	<.001	Age*Genotype		
4w	0.906	0.008	<.001	df	F	p
8w	0.001	0.956	0.285	2 / 65	1.999	0.144

Fig 3P	Total exploratory time (s) during the 3 rd day of the NLP test		
	Student t- Test		
	t	df	p
WT vs GSK-3-OE	3.774	15	0.002

Fig 3Q	Memory index during the 3 rd day of the NLP test		
	Student t- Test		
	t	df	p
WT vs GSK-3-OE	2.352	15	0.033

SUPPLEMENTARY FIGURE S1:

Percentage of the soma occupied by Gephyrin ⁺ clusters in adult-born DGCs					
KRUSKAL-WALLIS TEST					
	df	K	p		
Fig S1G	4 / 155	80.29	<.001		
	1w	2w	3w	4w	8w
1w	--	>.999	<.001	<.001	<.001
2w	>.999	--	<.001	<.001	<.001
3w	<.001	<.001	--	>.999	>.999
4w	<.001	<.001	>.999	--	>.999
8w	<.001	<.001	>.999	>.999	--

Percentage of the Apical Soma occupied by Gephyrin ⁺ clusters in adult-born DGCs					
KRUSKAL-WALLIS TEST					
	df	K	p		
Fig S1H	4 / 161	45.46	<.001		
	1w	2w	3w	4w	8w
1w	--	<.001	0.002	<.001	<.001
2w	<.001	--	>.999	>.999	>.999
3w	0.002	>.999	--	0.176	>.999
4w	<.001	>.999	0.176	--	>.999
8w	<.001	>.999	>.999	>.999	--

Percentage of the Basal Soma occupied by Gephyrin ⁺ clusters in adult-born DGCs					
KRUSKAL-WALLIS TEST					
	df	K	p		
Fig S1I	4 / 155	62.58	<.001		
	1w	2w	3w	4w	8w
1w	--	>.999	<.001	<.001	<.001
2w	>.999	--	<.001	<.001	<.001
3w	<.001	<.001	--	>.999	>.999
4w	<.001	<.001	>.999	--	>.999
8w	<.001	<.001	>.999	>.999	--

Percentage of the axon occupied by Gephyrin ⁺ clusters in adult-born DGCs					
KRUSKAL-WALLIS TEST					
	df	K	p		
Fig S1J	4 / 125	73.23	<.001		
	1w	2w	3w	4w	8w
1w	--	0.003	0.235	<.001	<.001
2w	0.003	--	>.999	0.024	<.001
3w	0.235	>.999	--	<.001	<.001
4w	<.001	0.024	<.001	--	>.999
8w	<.001	<.001	<.001	>.999	--

Fig S1K	PV ⁺ area surrounding Gephyrin ⁺ clusters in the 1 st order dendrites of adult-born DGCs				
	KRUSKAL-WALLIS TEST				
	df	K	p		
	4 / 141	13.78	0.008		
	1w	2w	3w	4w	8w
1w	--	>.999	0.876	>.999	0.643
2w	>.999	--	0.309	>.999	0.03
3w	0.876	0.309	--	>.999	>.999
4w	>.999	>.999	>.999	--	0.236
8w	0.643	0.03	>.999	0.236	--

Fig S1L	PV ⁺ area surrounding Gephyrin ⁺ clusters in the Soma of adult-born DGCs				
	KRUSKAL-WALLIS TEST				
	df	K	p		
	4 / 141	52.26	<.001		
	1w	2w	3w	4w	8w
1w	--	0.002	>.999	0.005	>.999
2w	0.002	--	<.001	<.001	<.001
3w	>.999	<.001	--	0.113	>.999
4w	0.005	<.001	0.113	--	0.398
8w	>.999	<.001	>.999	0.398	--

Fig S1M	PV ⁺ area surrounding Gephyrin ⁺ clusters in the Apical Soma of adult-born DGCs				
	KRUSKAL-WALLIS TEST				
	df	K	p		
	4 / 135	42.34	<.001		
	1w	2w	3w	4w	8w
1w	--	0.022	0.001	>.999	>.999
2w	0.022	--	>.999	<.001	0.017
3w	0.001	>.999	--	<.001	<.001
4w	>.999	<.001	<.001	--	0.756
8w	>.999	0.017	<.001	0.756	--

Fig S1N	PV ⁺ area surrounding Gephyrin ⁺ clusters in the Basal Soma of adult-born DGCs				
	KRUSKAL-WALLIS TEST				
	df	K	p		
	4 / 156	37.26	<.001		
	1w	2w	3w	4w	8w
1w	--	>.999	<.001	<.001	0.007
2w	>.999	--	0.001	0.002	0.192
3w	<.001	0.001	--	>.999	0.909
4w	<.001	0.002	>.999	--	>.999
8w	0.007	0.192	0.909	>.999	--

Fig S1O	PV ⁺ area surrounding Gephyrin ⁺ clusters in the axon of adult-born DGCs				
	KRUSKAL-WALLIS TEST				
	df	K	p		
	4 / 223	41.49	<.001		
	1w	2w	3w	4w	8w
1w	--	<.001	<.001	<.001	0.002
2w	<.001	--	>.999	0.025	>.999
3w	<.001	>.999	--	0.032	>.999
4w	<.001	0.025	0.032	--	0.004
8w	0.002	>.999	>.999	0.004	--

SUPPLEMENTARY FIGURE S2:

Total density of synaptic vesicles in inhibitory synapses made onto adult-born DGCs			
KRUSKAL-WALLIS TEST			
	df	K	p
Fig S2B	2 / 13	0.7465	0.721
	4w	8w	60w
4w	--	>.999	>.999
8w	>.999	--	>.999
60w	>.999	>.999	--

Density of the readily-releasable pool of synaptic vesicles in inhibitory synapses made onto adult-born DGCs			
KRUSKAL-WALLIS TEST			
	df	K	p
Fig S2C	2 / 13	1.137	0.606
	4w	8w	60w
4w	--	>.999	>.999
8w	>.999	--	>.999
60w	>.999	>.999	--

Density of the recycling pool of synaptic vesicles in inhibitory synapses made onto adult-born DGCs			
KRUSKAL-WALLIS TEST			
	df	K	p
Fig S2D	2 / 13	0.6782	0.74
	4w	8w	60w
4w	--	>.999	>.999
8w	>.999	--	>.999
60w	>.999	>.999	--

Density of the reserve pool of synaptic vesicles in inhibitory synapses made onto adult-born DGCs			
KRUSKAL-WALLIS TEST			
	df	K	p
Fig S2E	2 / 13	3.233	0.213
	4w	8w	60w
4w	--	>.999	0.313
8w	>.999	--	0.265
60w	0.313	0.265	--

SUPPLEMENTARY FIGURE S3:

Fig S3A		Density of Gephyrin ⁺ clusters in the Soma of adult-born DGCs					INTER-SUBJECT EFFECT		
		Two-way ANOVA					Age		
		GSK-3-OE					df	F	p
		1w	2w	3w	4w	8w	4 / 306	39.010	<.001
WT	1w	0.995	>.999	0.174	<.001	<.001	Genotype		
	2w	0.95	0.993	0.356	<.001	<.001	df	F	p
	3w	<.001	<.001	0.917	0.242	0.952	1 / 306	0.156	0.693
	4w	<.001	<.001	<.001	>.999	0.756	Age*Genotype		
	8w	0.026	0.045	>.999	0.002	0.114	df	F	p
						4 / 306	3.061	0.017	

Fig S3B		Density of Gephyrin ⁺ clusters in the Axon of adult-born DGCs					INTER-SUBJECT EFFECT		
		Two-way ANOVA					Age		
		GSK-3-OE					df	F	p
		1w	2w	3w	4w	8w	4 / 249	51.990	<.001
WT	1w	0.894	>.999	<.001	<.001	<.001	Genotype		
	2w	0.933	>.999	0.005	<.001	<.001	df	F	p
	3w	<.001	0.131	0.997	0.005	0.808	1 / 249	0.164	0.686
	4w	<.001	<.001	<.001	0.914	0.012	Age*Genotype		
	8w	<.001	0.015	>.999	0.105	>.999	df	F	p
						4 / 249	1.353	0.251	

Fig S3C		Area of Gephyrin ⁺ clusters in 1 st order dendrites of adult-born DGCs					INTER-SUBJECT EFFECT		
		Two-way ANOVA					Age		
		GSK-3-OE					df	F	p
		1w	2w	3w	4w	8w	4 / 187	8.961	<.001
WT	1w	0.914	0.027	>.999	>.999	0.998	Genotype		
	2w	0.115	<.001	0.445	0.988	>.999	df	F	p
	3w	0.946	0.919	0.031	<.001	<.001	1 / 187	4.730	0.031
	4w	0.325	<.001	0.87	>.999	0.997	Age*Genotype		
	8w	0.405	<.001	0.915	>.999	>.999	df	F	p
						4 / 187	10.440	<.001	

Fig S3D		Area of Gephyrin ⁺ clusters in 2-5 th order dendrites of adult-born DGCs					INTER-SUBJECT EFFECT		
		Two-way ANOVA					Age		
		GSK-3-OE					df	F	p
		1w	2w	3w	4w	8w	4 / 855	74.1	<.001
WT	1w	0.997	0.965	<.001	0.21	648	Genotype		
	2w	<.001	0.611	<.001	0.005	0.458	df	F	p
	3w	<.001	<.001	<.001	<.001	<.001	1 / 855	8.41	0.04
	4w	<.001	0.556	0.034	0.998	0.186	Age*Genotype		
	8w	<.001	0.527	0.052	0.996	0.172	df	F	p
						4 / 855	14.13	<.001	

Fig S3E		Area of Gephyrin ⁺ clusters in the soma of adult-born DGCs					INTER-SUBJECT EFFECT		
		Two-way ANOVA					Age		
		GSK-3-OE					df	F	p
		1w	2w	3w	4w	8w	4 / 259	8.533	<.001
WT	1w	0.062	<.001	0.062	0.971	>.999	Genotype		
	2w	0.552	0.002	0.611	>.999	0.934	df	F	p
	3w	0.094	0.923	0.02	<.001	<.001	1 / 259	0.117	0.732
	4w	0.432	0.001	0.484	>.999	0.987	Age*Genotype		
	8w	0.96	>.999	0.838	0.022	<.001	df	F	p
						4 / 259	14.930	<.001	

Fig S3F		Area of Gephyrin ⁺ clusters in the axon of adult-born DGCs					INTER-SUBJECT EFFECT		
		Two-way ANOVA					Age		
		GSK-3-OE					df	F	p
		1w	2w	3w	4w	8w	4 / 216	17.350	<.001
WT	1w	0.983	0.773	0.998	>.999	0.945	Genotype		
	2w	0.023	<.001	<.001	0.01	0.521	df	F	p
	3w	>.999	0.998	>.999	0.95	0.281	1 / 216	22.240	<.001
	4w	0.991	0.773	>.999	>.999	0.714	Age*Genotype		
	8w	<.001	<.001	<.001	<.001	<.001	df	F	p
						4 / 216	8.831	<.001	

Fig S3G		PV ⁺ area surrounding Gephyrin ⁺ clusters in the 1 st order dendrites of newborn DGCs					INTER-SUBJECT EFFECT		
		Two-way ANOVA					Age		
		GSK-3-OE					df	F	p
							4 / 312	9.093	<.001
		1w	2w	3w	4w	8w	Genotype		
WT	1w	>.999	>.999	0.947	0.942	0.751	df	F	p
	2w	0.983	>.999	0.365	0.155	<.001	1 / 312	0.802	0.371
	3w	0.067	0.276	>.999	>.999	0.751	Age*Genotype		
	4w	0.729	0.997	0.919	0.801	0.022	df	F	p
	8w	0.009	0.034	>.999	0.999	0.93	4 / 312	0.573	0.682

Fig S3H		PV ⁺ area surrounding Gephyrin ⁺ clusters in the axon of newborn DGCs					INTER-SUBJECT EFFECT		
		Two-way ANOVA					Age		
		GSK-3-OE					df	F	p
							4 / 388	9.552	<.001
		1w	2w	3w	4w	8w	Genotype		
WT	1w	>.999	0.001	<.001	<.001	<.001	df	F	p
	2w	0.415	0.869	0.161	0.517	0.089	1 / 388	2.367	0.125
	3w	0.2	0.993	0.44	0.887	0.281	Age*Genotype		
	4w	0.003	0.815	>.999	0.729	>.999	df	F	p
	8w	0.302	0.889	0.11	0.451	0.053	4 / 388	4.048	0.003

Fig S3I		Density of PV ⁺ interneurons		
		Student t- Test		
		t	df	p
WT vs GSK-3-OE		0.5512	16	0.589

Fig S3J		Classification of DG Parvalbumin (PV) ⁺ interneurons according to the intensity of Lectin ⁺ perineuronal nets (PNNs)										INTER-SUBJECT EFFECT		
		Two-way ANOVA										Intensity		
		GSK-3-OE										df	F	p
												11 / 192	34.570	<.001
		0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	Genotype			
WT	0-20	<.001	<.001	0.344	>.999	>.999	>.999	0.996	0.99	0.996	df	F	p	
	20-40	>.999	0.999	0.22	<.001	<.001	<.001	<.001	<.001	<.001	11 / 192	34.570	<.001	
	40-60	>.999	0.998	0.231	<.001	<.001	<.001	<.001	<.001	<.001	Age*Genotype			
	60-80	0.003	<.001	>.999	0.975	0.031	0.051	0.004	0.003	0.004	df	F	p	
	80-100	<.001	<.001	0.878	>.999	0.977	0.992	0.764	0.693	0.764	1 / 192	3.11E-20	>.999	
	100-120	<.001	<.001	0.155	>.999	>.999	>.999	>.999	>.999	>.999	Intensity*Genotype			
	120-140	<.001	<.001	0.063	0.996	>.999	>.999	>.999	>.999	>.999	df	F	p	
	140-160	<.001	<.001	0.008	0.869	>.999	>.999	>.999	>.999	>.999	11 / 192	6.610	<.001	
160-180	<.001	<.001	0.001	0.573	>.999	>.999	>.999	>.999	>.999					

Fig S3K		Classification of DG Parvalbumin (PV) ⁺ interneurons according to the intensity of Aggrecan ⁺ perineuronal nets (PNNs)										INTER-SUBJECT EFFECT		
		Two-way ANOVA										Intensity		
		GSK-3-OE										df	F	p
												11 / 192	42.360	<.001
		0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	Genotype			
WT	0-20	<.001	0.934	0.004	<.001	<.001	<.001	<.001	<.001	<.001	df	F	p	
	20-40	<.001	0.002	<.001	<.001	<.001	<.001	<.001	<.001	<.001	11 / 192	42.360	<.001	
	40-60	<.001	0.998	0.026	0.002	<.001	<.001	<.001	<.001	<.001	Age*Genotype			
	60-80	<.001	0.989	>.999	>.999	0.992	0.996	0.992	0.992	0.992	df	F	p	
	80-100	<.001	0.217	>.999	>.999	>.999	>.999	>.999	>.999	>.999	1 / 192	5.483E-20	>.999	
	100-120	<.001	0.117	>.999	>.999	>.999	>.999	>.999	>.999	>.999	Intensity*Genotype			
	120-140	<.001	0.139	>.999	>.999	>.999	>.999	>.999	>.999	>.999	df	F	p	
	140-160	<.001	0.117	>.999	>.999	>.999	>.999	>.999	>.999	>.999	11 / 192	12.500	<.001	
160-180	<.001	0.117	>.999	>.999	>.999	>.999	>.999	>.999	>.999					

Fig S3O	Frequency of mPSCs in developmentally generated and 1-week-old adult-born DGCs of WT and GSK-3 β -OE mice		INTER-SUBJECT EFFECT		
	Two-way ANOVA		Cell age		
	GSK-3-OE		df	F	p
			1 / 25	4.438	0.0453
WT	Embryonic	Adult	Genotype		
Embryonic	0.5134	--	df	F	p
Adult	--	0.2494	1 / 25	3.731	0.0648
			Age*Genotype		
			df	F	p
			1 / 25	0.05288	0.82

Fig S3P	Amplitude of mPSCs in developmentally generated and 1-week-old adult-born DGCs of WT and GSK-3 β -OE mice		INTER-SUBJECT EFFECT		
	Two-way ANOVA		Cell age		
	GSK-3-OE		df	F	p
			1 / 23	20.81	<.001
WT	Embryonic	Adult	Genotype		
Embryonic	0.0946	--	df	F	p
Adult	--	>0.9999	1 / 23	3.739	0.0655
			Age*Genotype		
			df	F	p
			1 / 23	0.88	0.3579

Fig S3Q	Slope of mPSCs in developmentally generated and 1-week-old adult-born DGCs of WT and GSK-3 β -OE mice		INTER-SUBJECT EFFECT		
	Two-way ANOVA		Cell age		
	GSK-3-OE		df	F	p
			1 / 23	20.08	<.001
WT	Embryonic	Adult	Genotype		
Embryonic	0.0722	--	df	F	p
Adult	--	>0.9999	1 / 23	2.179	0.1535
			Age*Genotype		
			df	F	p
			1 / 23	2.478	0.1291

SUPPLEMENTARY FIGURE S4:

Fig S4A	Sholl's analysis of 1-week-old adult-born DGCs				
	REPEATED MEASURES ANOVA TEST				
	WT vs GSK-3-OE				
Distance to the soma (μm)	μm	p	INTER-SUBJECT EFFECT		
	0	>.999			
	10	>.999	Distance		
	20	0.062	df	F	p
	30	<.001	35 / 2160	88.070	<.001
	40	<.001			
	50	<.001	Genotype		
	60	<.001	df	F	p
	70	>.999	1 / 2160	21.370	<.001
	80	>.999			
	90	>.999	Distance*Genotype		
	100	>.999	df	F	p
	110	>.999	35 / 2160	3.068	<.001
	120	>.999			
	130	>.999			
	140	>.999			
	150	>.999			
	160	>.999			
	170	>.999			
	180	>.999			
	190	>.999			
	200	>.999			
	210	>.999			
	220	>.999			
	230	>.999			
	240	>.999			
	250	>.999			
	260	>.999			
	270	>.999			
	280	>.999			
	290	>.999			
	300	>.999			
	310	>.999			
	320	>.999			
	330	>.999			
340	>.999				
350	>.999				

Fig S4B	Total dendritic length of 1-week-old adult-born DGCs		
	Student t- Test		
	t	df	p
WT vs GSK-3-OE	2.736	58	0.008

Fig S4C	Sholl's analysis of 2-week-old adult-born DGCs				
	REPEATED MEASURES ANOVA TEST				
	WT vs GSK-3-OE				
Distance to the soma (μm)	μm	p	INTER-SUBJECT EFFECT		
	0	>.999			
	10	>.999	Distance		
	20	0.005	df	F	p
	30	0.406	35 / 1044	110.400	<.001
	40	<.001			
	50	<.001	Genotype		
	60	>.999	df	F	p
	70	0.176	1 / 1044	0.005	0.944
	80	<.001			
	90	<.001	Distance*Genotype		
	100	0.27	df	F	p
	110	>.999	35 / 1044	3.804	<.001
	120	>.999			
	130	>.999			
	140	>.999			
	150	>.999			
	160	>.999			
	170	>.999			
	180	>.999			
	190	>.999			
	200	>.999			
	210	>.999			
	220	>.999			
	230	>.999			
	240	>.999			
	250	>.999			
	260	>.999			
	270	>.999			
	280	>.999			
	290	>.999			
	300	>.999			
	310	>.999			
	320	>.999			
	330	>.999			
340	>.999				
350	>.999				

Fig S4D	Total dendritic length of 2-week-old adult-born DGCs	
	Mann Whitney test	
	U	p
WT vs GSK-3-OE	422	0.686

Fig S4E	Sholl's analysis of 3-week-old adult-born DGCs				
	REPEATED MEASURES ANOVA TEST				
	WT vs GSK-3-OE				
Distance to the soma (μm)	μm	p	INTER-SUBJECT EFFECT		
	0	>.999			
	10	>.999	Distance		
	20	>.999	df	F	p
	30	0.692	35 / 1584	77.120	<.001
	40	>.999			
	50	>.999	Genotype		
	60	>.999	df	F	p
	70	>.999	1 / 1584	3.697	0.055
	80	>.999			
	90	>.999	Distance*Genotype		
	100	>.999	df	F	p
	110	>.999	35 / 1584	2.031	<.001
	120	>.999			
	130	>.999			
	140	>.999			
	150	>.999			
	160	0.004			
	170	0.008			
	180	0.077			
	190	0.086			
	200	>.999			
	210	>.999			
	220	>.999			
	230	>.999			
	240	>.999			
	250	>.999			
	260	>.999			
	270	>.999			
	280	>.999			
	290	>.999			
	300	>.999			
	310	>.999			
	320	>.999			
	330	>.999			
340	>.999				
350	>.999				

Fig S4F	Total dendritic length of 3-week-old adult-born DGCs		
	Student t- Test		
	t	df	p
WT vs GSK-3-OE	0.2788	43	0.782

Fig S4G	Sholl's analysis of 4-week-old adult-born DGCs				
	REPEATED MEASURES ANOVA TEST				
	WT vs GSK-3-OE				
Distance to the soma (μm)	μm	p	INTER-SUBJECT EFFECT		
	0	>.999	Distance		
	10	>.999	df	F	p
	20	>.999	35 / 1044	504.400	<.001
	30	>.999	Genotype		
	40	>.999	df	F	p
	50	>.999	1 / 720	2.27E-14	>0.999
	60	>.999	Distance*Genotype		
	70	>.999	df	F	p
	80	>.999	35 / 720	5.30E-15	>0.999
	90	>.999			
	100	>.999			
	110	>.999			
	120	>.999			
	130	>.999			
	140	>.999			
	150	>.999			
	160	>.999			
	170	>.999			
	180	>.999			
	190	>.999			
	200	>.999			
	210	>.999			
	220	>.999			
	230	>.999			
	240	>.999			
	250	>.999			
	260	>.999			
	270	>.999			
	280	>.999			
	290	>.999			
	300	>.999			
	310	>.999			
	320	>.999			
	330	>.999			
340	>.999				
350	>.999				

Fig S4H	Total dendritic length of 4-week-old adult-born DGCs		
	Student t- Test		
	t	df	p
WT vs GSK-3-OE	0.8483	51	0.4

Fig S4I	Sholl's analysis of 8-week-old adult-born DGCs				
	REPEATED MEASURES ANOVA TEST				
	WT vs GSK-3-OE				
Distance to the soma (μm)	μm	p	INTER-SUBJECT EFFECT		
	0	>.999			
	10	>.999	Distance		
	20	>.999	df	F	p
	30	>.999	35 / 1044	74.680	<.001
	40	>.999			
	50	>.999	Genotype		
	60	>.999	df	F	p
	70	0.035	1 / 1044	30.940	<.001
	80	<.001			
	90	<.001	Distance*Genotype		
	100	0.003	df	F	p
	110	0.419	35 / 1044	2.005	<.001
	120	>.999			
	130	>.999			
	140	>.999			
	150	>.999			
	160	>.999			
	170	>.999			
	180	>.999			
	190	>.999			
	200	>.999			
	210	>.999			
	220	>.999			
	230	>.999			
	240	>.999			
	250	>.999			
	260	>.999			
	270	>.999			
	280	>.999			
	290	>.999			
	300	>.999			
	310	>.999			
	320	>.999			
	330	>.999			
340	>.999				
350	>.999				

Fig S4J	Total dendritic length of 8-week-old adult-born DGCs		
	Student t- Test		
	t	df	p
WT vs GSK-3-OE	5.068	57	<.001

Fig S5H	Lectin ⁺ fluorescence intensity in PNN of PV ⁺ interneurons located at the Hilus		
	Student t- Test		
	t	df	p
WT vs GSK-3-OE	2.066	50	0.044

Fig S5I	Classification of PV ⁺ interneurons according to the intensity of Lectin ⁺ PNNs in the Hilus												
	ANOVA										INTER-SUBJECT EFFECT		
	GSK-3-OE										Intensity		
	0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	df	F	p	
WT	0-20	0.281	0.981	0.292	0.7	0.068	0.095	0.119	0.036	11 / 192	14.200	<.001	
	20-40	0.211	0.96	0.377	0.788	0.098	0.136	0.166	0.055				
	40-60	0.816	>.999	0.039	0.189	0.005	0.008	0.011	0.002				
	60-80	<.001	0.041	>.999	>.999	0.994	0.998	>.999	0.977	>.999			
	80-100	<.001	<.001	>.999	>.999	>.999	>.999	>.999	>.999	>.999	1 / 192	2.20E-18	>.999
	100-120	<.001	<.001	>.999	>.999	>.999	>.999	>.999	>.999	>.999			
	120-140	<.001	0.002	>.999	>.999	>.999	>.999	>.999	>.999	>.999			
	140-160	<.001	<.001	>.999	>.999	>.999	>.999	>.999	>.999	>.999			
	160-180	<.001	<.001	>.999	>.999	>.999	>.999	>.999	>.999	>.999	11 / 192	2.571	0.005

Fig S5J	Aggrecan ⁺ fluorescence intensity in PNN of PV ⁺ interneurons located at the GCL		
	Student t- Test		
	t	df	p
WT vs GSK-3-OE	5.805	48	<.001

Fig S5K	Classification of PV ⁺ interneurons according to the intensity of Aggrecan ⁺ PNNs in the GCL											
	ANOVA										INTER-SUBJECT EFFECT	
	GSK-3-OE										Intensity	
	0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	df	F	p
WT	0-20	<.001	>.999	0.598	0.154	0.096	0.096	0.096	0.096	11 / 192	24.110	<.001
	20-40	<.001	0.409	<.001	<.001	<.001	<.001	<.001	<.001			
	40-60	<.001	0.923	0.011	<.001	<.001	<.001	<.001	<.001			
	60-80	<.001	0.998	>.999	>.999	>.999	>.999	>.999	>.999			
	80-100	<.001	0.491	>.999	>.999	>.999	>.999	>.999	>.999	1 / 192	2.10E-19	>.999
	100-120	<.001	0.347	>.999	>.999	>.999	>.999	>.999	>.999			
	120-140	<.001	0.347	>.999	>.999	>.999	>.999	>.999	>.999			
	140-160	<.001	0.347	>.999	>.999	>.999	>.999	>.999	>.999			
	160-180	<.001	0.347	>.999	>.999	>.999	>.999	>.999	>.999	11 / 192	8.874	0.031

Fig S5L	Aggrecan ⁺ fluorescence intensity in PNN of PV ⁺ interneurons located at the SGZ	
	Mann Whitney test	
	U	p
WT vs GSK-3-OE	182	<.001

Fig S5M	Classification of PV ⁺ interneurons according to the intensity of Aggrecan ⁺ PNNs in the SGZ											
	ANOVA										INTER-SUBJECT EFFECT	
	GSK-3-OE										Intensity	
	0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	df	F	p
WT	0-20	<.001	>.999	0.3	0.14	0.044	0.044	0.044	0.044	11 / 192	26.750	<.001
	20-40	0.028	<.001	<.001	<.001	<.001	<.001	<.001	<.001			
	40-60	<.001	>.999	0.461	0.247	0.089	0.089	0.089	0.089			
	60-80	<.001	0.743	>.999	>.999	>.999	>.999	>.999	>.999			
	80-100	<.001	0.379	>.999	>.999	>.999	>.999	>.999	>.999	1 / 192	8.27E-20	>.999
	100-120	<.001	0.272	>.999	>.999	>.999	>.999	>.999	>.999			
	120-140	<.001	0.272	>.999	>.999	>.999	>.999	>.999	>.999			
	140-160	<.001	0.272	>.999	>.999	>.999	>.999	>.999	>.999			
	160-180	<.001	0.272	>.999	>.999	>.999	>.999	>.999	>.999	11 / 192	8.704	<.001

Fig S5N	AggreCAN ⁺ fluorescence intensity in PNN of PV ⁺ interneurons located at the Hilus	
	Mann Whitney test	
	U	p
WT vs GSK-3-OE	130	0.003

Fig S5O	Classification of PV ⁺ interneurons according to the intensity of AggreCAN ⁺ PNNs in the Hilus												
	ANOVA										INTER-SUBJECT EFFECT		
	GSK-3-OE										Intensity		
		0-20	20-40	40-60	60-80	80-100	100-120	120-140	140-160	160-180	df	F	p
WT	0-20	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	11 / 192	47.470	<.001
	20-40	<.001	0.997	0.376	0.519	0.221	0.519	0.221	0.221	0.221			
	40-60	<.001	0.276	0.004	0.009	0.001	0.009	0.001	0.001	0.001	Genotype		
	60-80	<.001	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	df	F	p
	80-100	<.001	>.999	>.999	>.999	>.999	>.999	>.999	>.999	>.999	1 / 192	1.67E-20	>.999
	100-120	<.001	0.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999			
	120-140	<.001	0.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	Intensity*Genotype		
	140-160	<.001	0.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	df	F	p
160-180	<.001	0.996	>.999	>.999	>.999	>.999	>.999	>.999	>.999	11 / 192	5.497	<.001	