

SUPPLEMENTAL MATERIAL

Artegiani et al., <http://www.jem.org/cgi/content/full/jem.20102167/DC1>

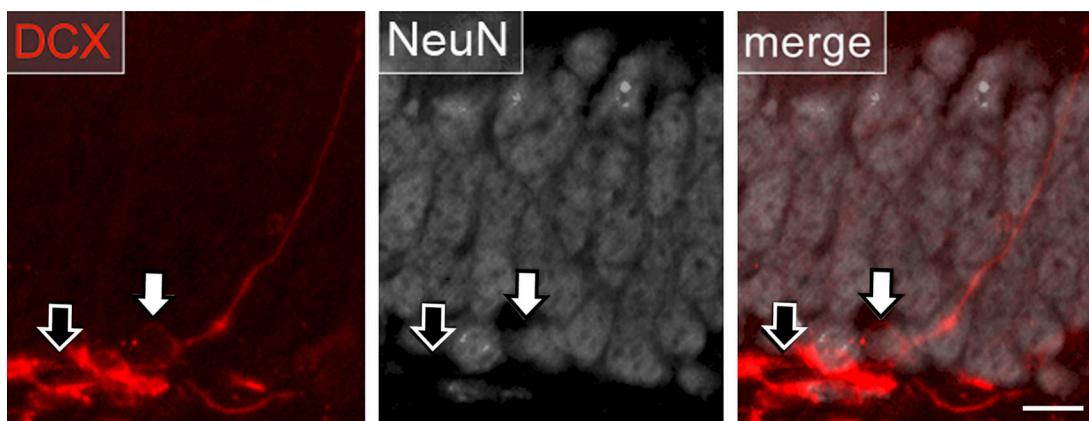


Figure S1. Morphological parameters can be used to discriminate between DCX⁺ type 3 neuroblasts and DCX⁺ newborn neurons. Fluorescence pictures of the granular and subgranular zone after immunohistochemistry for DCX (left) and NeuN (middle; shown together in merge). No NeuN immunoreactivity was detected in a cell scored as type 3 neuroblasts (black arrows) based on its location in the subgranular zone, polygonal shape, and nucleus parallel to the subgranular zone, whereas a cell scored as a newborn neuron (white arrows) based on its location in the granular zone, elongated shape with processes, and nucleus perpendicular to the subgranular zone being NeuN⁺. Bar, 5 μm.

MOUSE	VIRUS	TIME	GFP	BrdU	Sox2/BrdU		MOUSE	VIRUS	TIME	GFP	nestin				
1	GFP	1 W	3157	57	-		41	GFP	3 W	2739	64				
2	GFP	1 W	3584	66	-		42	GFP	3 W	3137	61				
3	GFP	1 W	3332	49	-		43	GFP	3 W	2765	64				
4	4DG	1 W	1203	32	-		44	4DG	3 W	1966	94				
5	4DG	1 W	1185	33	-		45	4DG	3 W	1354	90				
6	4DG	1 W	1156	39	-		46	4DG	3 W	1048	58				
7	GFP	1 W	1307	20	8	Fig 2d and f						Fig 3e			
8	GFP	1 W	2184	29	17										
9	GFP	1 W	1756	14	13										
10	4DG	1 W	1158	27	13										
11	4DG	1 W	1169	26	17										
12	4DG	1 W	1107	38	21										
13	4DG	1 W	1302	29	17										
14	GFP	2 W	4565	77	-										
15	GFP	2 W	7686	180	-										
16	GFP	2 W	2469	31	-										
17	4DG	2 W	2078	65	-										
18	4DG	2 W	2935	83	-										
19	4DG	2 W	1716	52	-										
20	GFP	3 W	8430	112	-										
21	GFP	3 W	6518	88	-										
22	GFP	3 W	2808	48	-										
23	4DG	3 W	1320	47	-										
24	4DG	3 W	1122	39	-										
25	4DG	3 W	3249	108	-										
29	GFP	1+3 W	6499	13	-	Fig 2e									
30	GFP	1+3 W	5286	11	-										
31	GFP	1+3 W	3095	8	-										
32	4DG	1+3 W	2025	8	-										
33	4DG	1+3 W	2801	5	-										
34	4DG	1+3 W	3329	11	-										
26	G ^{lox} 4D	3 W	4086	80	-	Fig 6e									
27	G ^{lox} 4D	3 W	4356	65	-										
28	G ^{lox} 4D	3 W	4454	63	-										
MOUSE	VIRUS	TIME	GFP	S100 β	GFAP/S100 β -		MOUSE	VIRUS	TIME	RFP	DCX N	DCX P			
35	GFP	3 W	3074	172	78	Fig 3e and 6c	67	GFP ^{lox}	5 W	3096	83	38	29	70	Fig 5-d-f
36	GFP	3 W	2815	120	76		68	GFP ^{lox}	5 W	4430	128	28	18	66	
37	GFP	3 W	3213	147	75		69	GFP ^{lox}	5 W	2909	44	8	7	85	
38	4DG	3 W	1576	104	88		70	G ^{lox} 4D	5 W	8522	458	235	192	310	
39	4DG	3 W	1297	64	75		71	G ^{lox} 4D	5 W	7479	495	247	213	311	
40	4DG	3 W	2917	132	131		72	G ^{lox} 4D	5 W	5068	434	182	146	242	
							73	RFP	3 W	83	54	18		Fig 4c and d	
							74	RFP	3 W	51	34	10			
							75	RFP	3 W	69	48	16			
							76	4DR	3 W	79	57	18			
							77	4DR	3 W	105	83	16			
							78	4DR	3 W	59	37	17			

Figure S2. Table summarizing the animals used, manipulation performed, survival time, GFP⁺ cells counted, number of those positive for any given marker, and figure in which the values are depicted. Numbers represent the entire population of cells counted in one group of serial section (most typically 7) from one hippocampus. Six groups of vibratome sections were collected from one hippocampus. W, week.

Table S1. List of antibodies used for this study

Antigen	Company	Application	Dilution	Notes
α -Tubulin	Sigma-Aldrich	WB	1:5,000	
BrdU	Abcam	IHC	1:300	1
cdk4	Santa Cruz Biotechnology, Inc.	WB	1:100	
Cy-labeled secondary antibodies	Jackson ImmunoResearch Laboratories, Inc.	IHC	1:1,000	
cyclinD1	Santa Cruz Biotechnology, Inc.	WB	1:1,000	
DCX (c18)	Santa Cruz Biotechnology, Inc.	IHC	1:100	2
GFAP	Millipore	IHC	1:500	
GFP	Rockland	IHC	1:1,000	
			1:400	
Horseradish peroxidase-coupled secondary antibodies	Jackson ImmunoResearch Laboratories, Inc.	WB	1:2,000	
nestin	BD	IHC	1:1,000	
NeuN	Millipore	IHC	1:500	
Olig2	Millipore	IHC	1:1,000	
pRb (Ser608)	Cell Signaling Technology	WB	1:1,000	
RFP	Rockland	IHC	1:2,000	
S100- β	Abcam	IHC	1:1,000	
Sox2	Millipore	IHC	1:500	
Tbr2	Abcam	IHC	1:400	3
VEGF-R2	Cell Signaling Technology	IHC	1:200	3

IHC, immunohistochemistry; WB, Western blot. Notes: 1, requires 30-min treatment with 2N HCl before blocking; 2, brains were not perfused; 3, requires 30-min boiling in antigen-retrieval solution (Dako) before permeabilization.