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Supplemental Information

Lineage Tracing and Cell Potential of Postnatal Single Progenitor Cells *In Vivo*

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Table S1

Figueres-Oñate et al., 2016

1	2	3	4	5	6	N=1	N=2	N=3	N=4	N=5	fa	f %	Original Positon
0	0	0	0	0	0	0	0	0	0	0	0	0,00	1
0	2	3	0	0	6	0	1	0	0	0	1	0,01	2
0	0	3	4	0	6	2	0	0	1	0	3	0,04	3
1	2	3	0	0	6	0	1	1	2	0	4	0,06	4
1	0	3	4	0	0	1	1	1	1	2	6	0,09	5
0	2	0	0	0	6	2	0	3	2	0	7	0,10	6
0	2	3	4	0	6	2	3	1	0	3	9	0,13	7
0	2	3	0	5	0	0	9	2	0	0	11	0,16	8
1	0	0	4	5	0	0	0	9	0	2	11	0,16	9
1	0	3	4	0	6	0	1	0	2	8	11	0,16	10
1	0	3	4	5	0	4	1	5	1	1	12	0,18	11
0	2	3	0	0	0	1	12	1	0	0	14	0,21	12
0	2	3	0	5	6	3	10	5	1	0	19	0,28	13
1	2	0	0	5	0	6	3	7	0	3	19	0,28	14
0	2	0	0	5	0	2	7	11	0	0	20	0,30	15
1	2	3	0	5	0	7	3	3	0	8	21	0,31	16
1	0	3	0	0	0	1	9	4	0	8	22	0,33	17
1	0	0	4	0	6	1	0	2	1	20	24	0,36	18
1	2	3	0	0	0	0	0	15	0	9	24	0,36	19
1	0	3	0	0	6	0	14	0	0	13	27	0,40	20
1	2	3	4	5	0	4	4	9	1	9	27	0,40	21
1	2	3	4	0	6	6	0	0	5	17	28	0,42	22
1	2	0	4	5	0	8	7	15	0	1	31	0,46	23
1	2	3	4	0	0	3	5	15	0	11	34	0,51	24
0	0	3	0	0	6	5	27	3	1	2	38	0,57	25
0	2	0	4	5	0	6	15	13	2	5	41	0,61	26
1	2	0	0	0	6	8	1	0	22	10	41	0,61	27
1	0	0	0	5	0	3	8	31	0	1	43	0,64	28
0	2	0	4	0	6	3	22	1	8	10	44	0,66	29
1	0	0	4	0	0	3	2	22	4	14	45	0,67	30
1	0	0	4	5	6	7	3	11	1	23	45	0,67	31
0	2	0	0	5	6	6	5	23	12	0	46	0,69	32
0	2	3	4	0	0	4	35	6	1	1	47	0,70	33
1	2	0	0	0	0	20	2	13	0	13	48	0,72	34
1	2	0	0	5	6	15	2	6	20	5	48	0,72	35
0	2	3	4	5	0	6	28	3	1	11	49	0,73	36
0	2	0	4	5	6	30	7	13	2	3	55	0,82	37
1	2	0	4	0	0	7	2	27	8	17	61	0,91	38
1	2	3	0	5	6	19	25	5	7	6	62	0,93	39
0	0	3	4	5	0	13	17	20	0	13	63	0,94	40
1	2	0	4	0	6	10	0	2	24	28	64	0,96	41
0	0	0	4	0	6	9	9	5	10	32	65	0,97	42
0	0	3	4	0	0	14	30	17	1	3	65	0,97	43
0	2	3	4	5	6	19	31	8	0	7	65	0,97	44
1	0	0	0	0	0	1	38	7	16	10	72	1,08	45
1	2	0	4	5	6	27	2	11	19	20	79	1,18	46
1	0	3	0	5	0	2	44	26	0	8	80	1,20	47
0	2	0	0	0	0	4	38	37	2	0	81	1,21	48
0	0	3	4	5	6	32	40	19	1	8	100	1,49	49
1	0	3	4	5	6	15	42	22	0	21	100	1,49	50
0	0	0	4	5	0	34	18	50	3	4	109	1,63	**51**
1	0	0	0	0	6	3	3	0	32	117	155	2,32	**52**
1	0	0	0	5	6	25	51	40	22	21	159	2,38	**53**
0	0	0	0	0	6	7	21	18	90	39	175	2,62	**54**
0	0	0	4	5	6	64	21	54	39	18	196	2,93	**55**
1	2	3	4	5	6	66	21	39	17	57	200	2,99	**56**
0	0	3	0	5	6	110	112	83	24	2	331	4,95	**57**
0	2	0	4	0	0	43	143	84	62	28	360	5,38	**58**
0	0	3	0	5	0	50	174	127	9	13	373	5,58	**59**
1	0	3	0	5	6	59	179	101	4	37	380	5,68	**60**
0	0	3	0	0	0	16	312	82	5	26	441	6,59	**61**
0	0	0	4	0	0	102	119	155	66	32	474	7,09	**62**
0	0	0	0	5	0	74	136	375	48	35	668	9,99	**63**
0	0	0	0	5	6	271	125	225	108	8	737	11,02	**64**
						1265	**2001**	**1893**	**708**	**823**	**6690**	**100,00**	

Frequent combinations

Figueres-Oñate et al., 2019

1	2	3	4	5	6	fa	f %	Original Positon	VALUE	Actuall Positon
0	0	0	0	0	0	7	0,01	1	=	1
0	2	3	0	0	6	9614	0,05	2	=	2
0	2	3	0	5	0	4147	0,06	8	↗	3
0	2	3	0	5	6	5357	0,09	13	↗	4
1	0	3	4	5	0	7219	0,11	11	↗	5
0	2	0	0	0	6	944	0,11	6	=	6
0	2	0	0	5	0	1155	0,12	15	↗	7
0	2	3	0	0	0	1395	0,15	12	↗	8
0	2	0	0	5	6	9085	0,15	32	↗	9
1	0	0	4	5	0	1816	0,19	9	↘	10
1	0	3	4	0	0	2163	0,21	5	↘	11
1	2	3	0	5	0	2364	0,22	16	↗	12
1	2	0	0	5	0	1235	0,25	14	↗	13
1	2	0	4	5	0	658	0,25	23	↗	14
0	2	0	0	0	0	535	0,28	48	↗	15
1	2	3	4	5	0	1323	0,28	21	↗	16
0	2	3	4	0	6	280	0,35	7	↘	17
0	2	0	4	5	0	112	0,37	26	↗	18
0	2	0	4	0	6	118	0,42	29	↗	19
0	2	0	4	5	6	157	0,46	37	↗	20
1	0	3	4	0	6	2353	0,49	10	↘	21
0	2	3	4	5	0	424	0,50	36	↗	22
1	0	3	0	5	0	380	0,52	47	↗	23
0	0	3	4	5	0	465	0,53	40	↗	24
1	0	0	4	0	6	156	0,55	18	↘	25
1	0	0	4	5	6	51	0,61	31	↗	26
0	0	3	4	0	6	56	0,65	3	↘	27
0	2	3	4	5	6	89	0,68	44	↗	28
1	2	0	4	0	6	974	0,77	41	↗	29
1	0	3	4	5	6	359	0,81	50	↗	30
1	2	3	4	0	0	513	0,82	24	↘	31
0	0	0	4	0	6	688	0,93	42	↗	32
1	0	0	4	0	0	6727	0,95	30	↘	33
0	2	3	4	0	0	3755	0,96	33	↘	34
1	2	3	0	0	0	1163	0,96	19	↘	35
1	2	0	4	5	6	2303	1,07	46	↗	36
0	0	0	4	5	0	965	1,14	**51**	↗	37
1	0	0	0	5	0	557	1,14	28	↘	38
1	2	0	4	0	0	195	1,19	38	↘	39
0	0	3	4	0	0	621	1,21	43	↗	40
1	2	3	0	5	6	1746	1,24	39	↘	41
1	2	3	0	0	6	1366	1,27	4	↘	42
0	0	3	4	5	6	529	1,30	49	↗	43
1	0	3	0	0	6	1836	1,34	20	↘	44
0	0	0	4	5	6	217	1,37	**55**	↗	45
1	2	0	0	5	6	497	1,40	35	↘	46
1	2	0	0	0	6	111	1,63	27	↘	47
1	0	3	0	0	0	821	1,72	17	↘	48
0	0	3	0	0	6	2121	1,79	25	↘	49
1	0	3	0	5	6	1657	1,81	**60**	↗	50
1	2	0	0	0	0	253	2,09	34	↘	51
0	0	3	0	5	0	1426	2,13	**59**	↗	52
1	0	0	0	5	6	1211	2,26	**53**	=	53
0	2	0	4	0	0	779	2,31	**58**	↗	54
0	0	3	0	5	6	255	2,32	**57**	↗	55
1	2	3	4	0	6	1086	2,37	22	↘	56
1	0	0	0	0	6	976	3,69	**52**	↘	57
0	0	0	0	5	0	1291	4,08	**63**	↗	58
0	0	0	0	5	6	222	5,27	**64**	↗	59
1	2	3	4	5	6	1261	5,92	**56**	↘	60
1	0	0	0	0	0	837	6,61	45	↘	61
0	0	0	4	0	0	2413	7,10	**62**	=	62
0	0	3	0	0	0	283	8,93	**61**	↘	63
0	0	0	0	0	6	6024	9,45	**54**	↘	64
						101696	**100,00**			

Frequent combinations

Table S1. Frequency of the fluorescent combinations using the UbC-StarTrack clonal method.

Figure S1

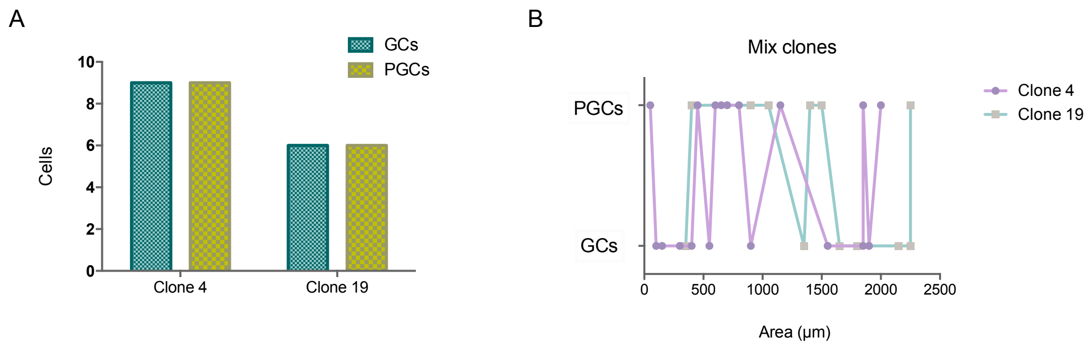

Figure S1.

A. The proportion of sibling GCs and PGCs within mix clones was equitable in both examples presented within our clonal analysis.
B. Sibling GCs and PGCs presented a random dispersion along the rostro-caudal axis in both mix clones (Clone 4 and Clone 19).

Figure S2

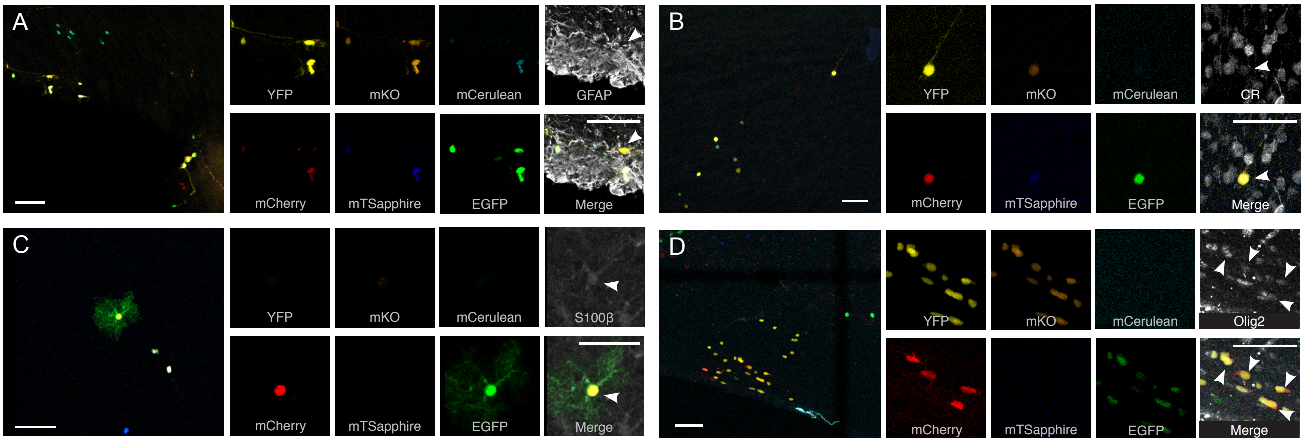

Figure S2.

A. GFAP staining can be used to label NPCs in the SVZ close to the lateral ventricle. The six fluorescent reporter proteins are included into different channels showing the color code of GFAP positive single NPC.
B. UbC-StarTrack labeled interneurons co-expressed Calretinin antibody.
C. To identify the astroglial population, S100β immunostaining was performed. Labeled protoplasmic astrocytes with UbC-StarTrack colocalized with the antibody.
D. Cells from the oligodendroglial lineage were identified using Olig2 immunomarker.
Arrowheads display the sibling cells that co-expressed with the antibodies.
Scale bars 50 µm.

Figure S3

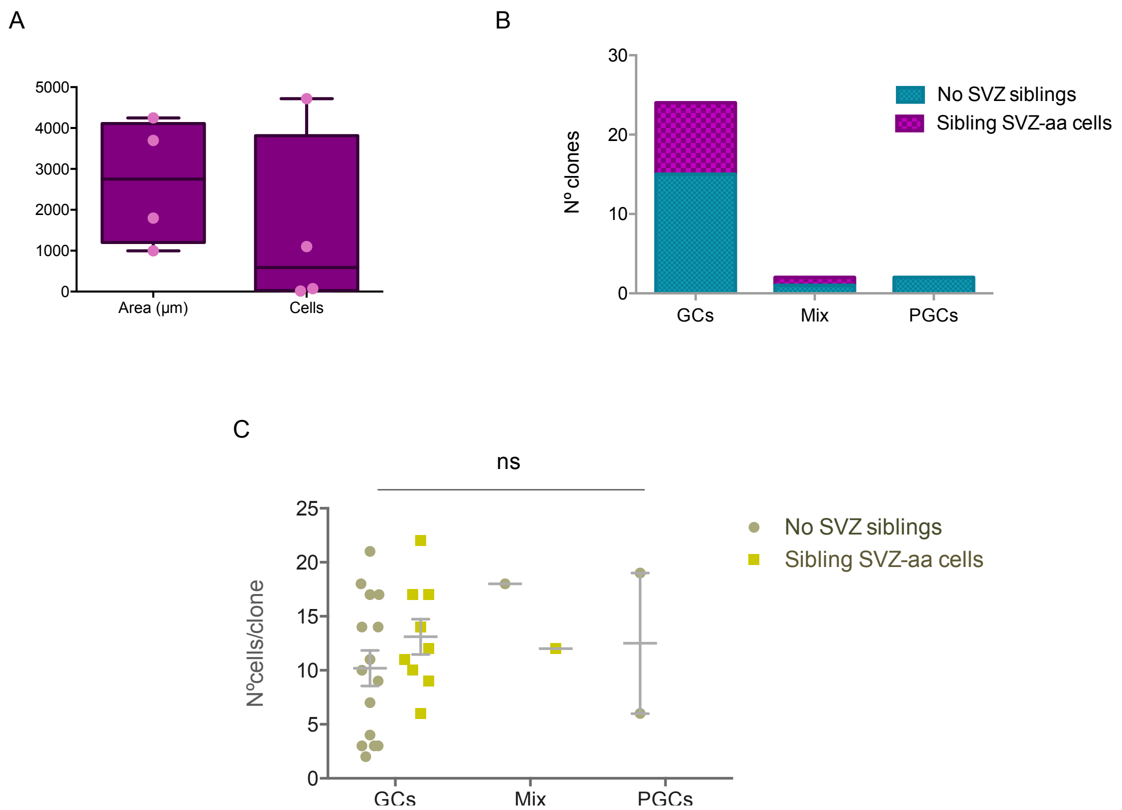

Figure S3

A. An average of 1477 ± 1109 labeled cells were present in the telencephalic region of four different analyzed animals. The average of cortical areas containing sparsed cells was 2688 ± 769 µm. Box plots show all values, from minimal to maximal among the median bar.

B. The proportion of clones that presented sibling cells in the SVZ-aa is maintained within distinct interneuronal clonal types.

C. Clone size was not significant different between clones of interneurons with the different layer-conformation. Statistical significance across the groups is indicated as follows: ns, nonsignificant, $P > 0.05$; *, $P \leq 0.05$; **, $P \leq 0.01$; ***, $P \leq 0.001$.

Figure S4

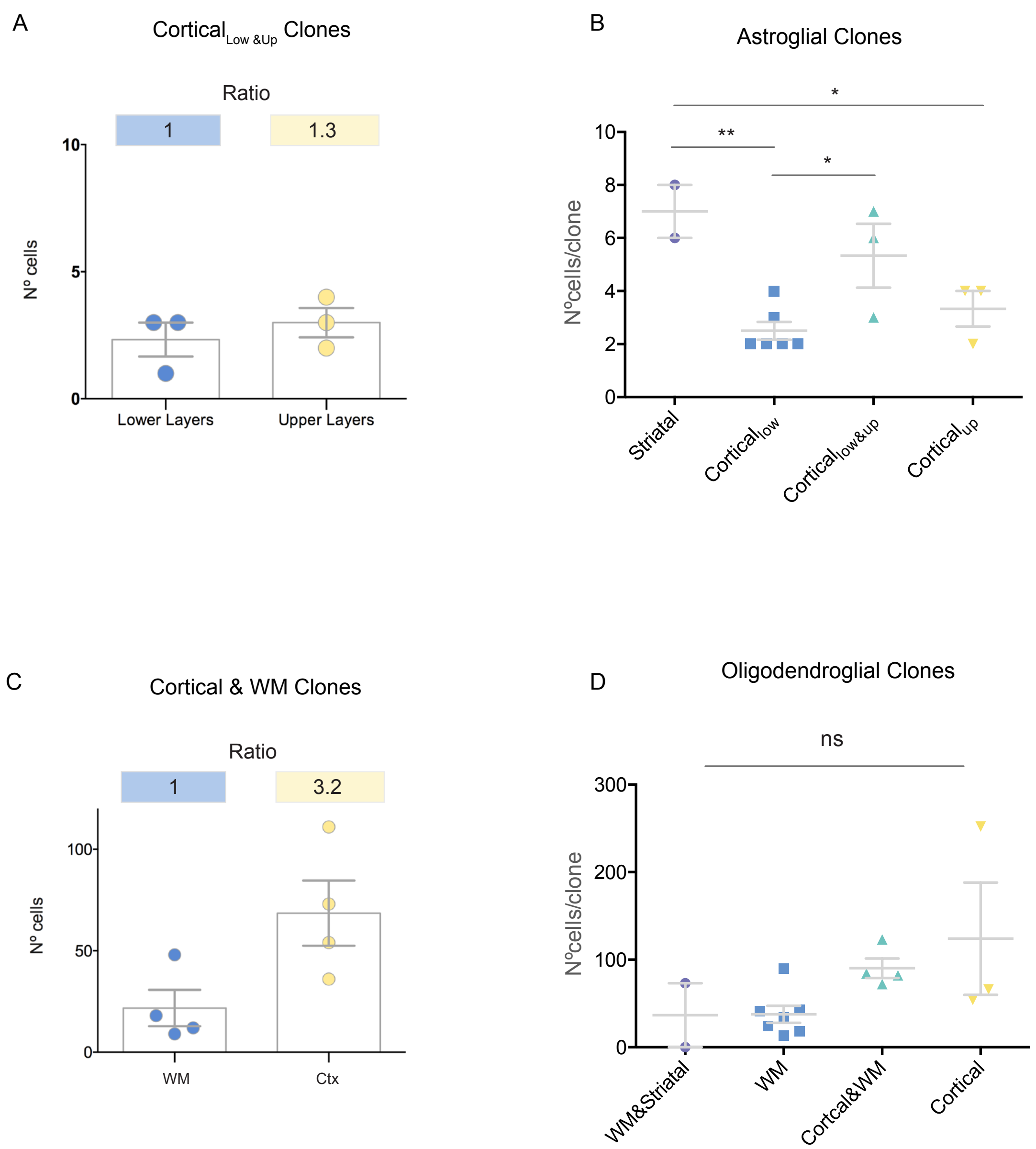

Figure S4

A. Cortical$_{low\&up}$ clones of astrocytes presented sibling astrocytes located in lower/upper layers in a 1 : 1.3 ratio.
B. Variation of the astrocyte clone size related to the distribution through ventricular adjacent areas. Striatal clones displayed the highest number of siblings (7 ± 1 cells/clone). No significant differences were found within Cortical$_{up}$ clones (3.33 ± 0.66 cells/clone) and Cortical$_{low\&up}$ clones (5.33 ± 1.2) or Cortical$_{low}$ clones (2.5 ± 0.34 cells/clone).
C. In oligodendroglial Cortical&WM clones sparsed within the subcortical white matter and the cortex, cells were preferentially positioned in the cortical layer in a 1 : 3.2 ratio.
D. Regarding to clone size, there were no significant differences in the distinct oligodendroglial clones types regarding their siblings distribution through the SVZ adjacent areas.
Statistical significance across the groups is indicated as follows: ns, nonsignificant, $P > 0.05$; *, $P \leq 0.05$; **, $P \leq 0.01$; ***, $P \leq 0.001$.