

Table S1. Summary of experiments, phenotypes and data analysis of transfected embryos

Experiment	Phenotype or test	Experiment N _{Ph} /N _T	Experiment Ns	Control N _{Ph} /N _T	Control Ns	Data shown in
<i>Mnb/Dyrk1a</i> HH12+18 hours*	Decreased BrdU incorporation	5/5	5	5/5	5	Fig. 1A-C
<i>Mnb/Dyrk1a</i> HH12+18 hours*	Co-expression of PH3	9/9	5	9/9	5	Fig. 1D-F
<i>Mnb/Dyrk1a</i> LoF	Increased BrdU incorporation	6/7	5	5/5	5	Fig. 1G-I
<i>Mnb/Dyrk1a</i> LoF	Increased Caspase-3 labelling	7/7	4	5/5	4	Fig. 1J-L
<i>Mnb/Dyrk1a</i> HH12+18 hours*	Increased p27 ^{KIP1} expression	11/11	5	10/10	5	Fig. 2A,B,K
<i>Mnb/Dyrk1a</i> -LoF	Decreased p27 ^{KIP1} expression	8/9	4	8/8	4	Fig. 2C,D,L
<i>Mnb/Dyrk1a</i> E14,5+24 hours*	Increased p27 ^{KIP1} expression	6/6	5	6/6	4	Fig. 2F,H,M
siRNA <i>Mnb/Dyrk1a</i> E14,5+24 hours*	Decreased p27 ^{KIP1} expression	6/6	4	3/3	4	Fig. 2J,H,M
<i>Mnb/Dyrk1a</i> HH12+15 hours*	Decreased HES5 expression	6/7	5	4/4	5	Fig. 3C,D,G
<i>Mnb/Dyrk1a</i> HH12+15 hours*	Increased DELTA1 expression	8/10	5	5/5	5	Fig. 3E,F,H
<i>Mnb/Dyrk1a+NICD</i> HH12+18 hours*	Decreased BrdU incorporation	5/5	5	5/5	5	Fig. 5B,C
<i>NICD</i> HH12+18 hours*	Increased BrdU incorporation	5/5	5	5/5	5	Fig. 5A,C
<i>Mnb/Dyrk1a+NICD</i> HH12+18 hours*	Increased p27 ^{KIP1} expression	5/5	5	7/7	5	Fig. 5E,F
<i>NICD</i> HH12+18 hours*	Decreased p27 ^{KIP1} expression	5/5	5	7/7	5	Fig. 5D,F
<i>Delta</i> ^{DN} HH12+ Harmine+18 hours*	Decreased TUJ1 expression	6/6	3	6/6	3	Fig. 6A
<i>Mnb/Dyrk1a</i> LoF	Decreased TUJ1 expression	7/8	4	6/6	4	Fig. 6B-D
<i>Mnb/Dyrk1a</i> HH12+18 hours*	Slightly increased TUJ1 expression	23/23	5	12/12	4	Fig. 6F,J
<i>Mnb/Dyrk1a</i> HH12+36 hours*	Slightly increased TUJ1 expression	7/7	3	7/7	3	Fig. S4
<i>Mnb/Dyrk1a</i> + <i>Delta</i> ^{DN} HH12+18 hours*	Slightly increased TUJ1 expression	8/8	8	6/6	4	Fig6. G,J
<i>Delta</i> ^{DN} HH12+18 hours*	Increased TUJ1 expression	9/9	6	6/6	4	Fig. 6J
<i>Mnb/Dyrk1a</i> + <i>DELTA</i> HH12+18 hours*	Slightly increased TUJ1 expression	6/6	6	6/6	4	Fig. 6I,J
<i>Delta</i> HH12+18 hours*	Increased TUJ1 expression	8/8	4	6/6	4	Fig. 6H, J
<i>Mnb/Dyrk1a</i> HH12+24 hours+harmine*	Increased TUJ1 expression	7/7	4	8/8	5	Fig. 7A-C
<i>Mnb/Dyrk1a</i> HH12+36 hours*	Increased p27 ^{KIP1} expression	6/6	4	6/6	4	Fig. S4
<i>Mnb/Dyrk1a</i> HH12+36 hours*	Equal caspase 3 labelling	6/6	3	6/6	3	Fig. S4

*Electroporation experiments.

NPh, number of embryos that exhibit a clear phenotype; NT, total number of analyzed embryos; Ns, number of embryos in which cell counting was performed.