**Table S6. Validation and quantification of miRNAs in maturing neurons.** Pearson's correlation coefficient ( $R_{array}$ ) based on the microarray data, was computed between SLR and days 2, 4, 6, 8 after maturation. Pearson's correlation coefficient ( $R_{qPCR}$ ) based on qPCR, was computed between fold change and days 2, 4, 6, 8, 14 after maturation. Expression is shown in fold change  $\pm$  SD relative to Day 2. Expression of GAPDH was used as a control/housekeeping gene to normalize miRNA expression. Statistically significant differences were tested using the two sample *t-test* (\*p<0.05, \*\*p<0.01). Mean  $C_T$  value  $\pm$  SD for the no template control (NTC) is indicated.

	Microarray	qPCR (Fold change ± SD)					$qPCR (C_T \pm SD)$
	$R_{array}$	D4	D6	D8	D14	$R_{qPCR}$	NTC
miR-124	-0.44	$1.25 \pm 0.01$ *	$1.16 \pm 0.09*$	$-1.12 \pm 0.05$	$-1.70 \pm 0.01**$	-0.99	Undetermined
miR-129	-0.22	$1.81 \pm 0.04**$	$2.24 \pm 0.03**$	$1.34 \pm 0.02*$	-4.80 ± 0.01**	-0.95	Undetermined
miR-218	-0.35	$1.30 \pm 0.03**$	$-1.07 \pm 0.04*$	$1.31 \pm 0.02**$	$1.23 \pm 0.08**$	0.15	Undetermined
miR-290-5p	0.15	$-1.04 \pm 0.19$	$1.16 \pm 0.01**$	$1.36 \pm 0.47$	$2.25 \pm 1.09*$	1.00	Undetermined
miR-326	0.44	$1.43 \pm 0.29$	$1.25 \pm 0.02**$	$1.87 \pm 0.01**$	$-1.26 \pm 0.03*$	-0.70	Undetermined
miR-203	-0.99	-1.67 ± 0.02**	-3.17 ± 0.03**	-3.16 ± 0.02**	$-5.44 \pm 0.01**$	-0.93	Undetermined
miR-377	-0.99	$12.51 \pm 3.84*$	12.00 ± 0.69**	$5.13 \pm 1.01$ *	-1.91 ± 0.01**	-0.98	Undetermined