A.

Β.

miR-34a/ RNU expression after NTC or 34A mimic transfection

	34A PCR	34B PCR	34C PCR	34A std dev	34 B std dev	34C std dev
no reagent	6.4	0.0	0.1	4.7	0.0	0.1
NTC	0.0	0.0	0.0	0.0	0.0	0.0
34A mimic	80249	10.1	0.0	3362	0.0	0.0
34B mimic	0.1	25976	2.8	0.1	6028	0.4
34C mimic	0.0		31579	0.1	0.0	4584

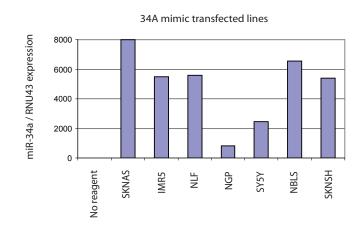


Figure S1: A. miR mimics could be measured by quantitative microRNA RT-PCR. SK-N-AS cells were transfected with miR-34a, b, or c mimics and then analyzed by microRNA RT-PCR (as described in material and methods). "no reagent" indicates that no Dharmafect I was added. B. Over-expression of miR-34A is achieved in all of the neuroblastoma cell lines.

SKNAS G0/G1 (%) S phase (%) G2/Gm (%) Sub G0 (%) NLF G0/G1 (%) S phase (%) G2/Gm (%) Sub G0 (%) 22.59 15.79 24N 53.12 28.86 15.53 1.13 24N 59.85 24A 76.09 10.81 11.91 0.8 24A 63.75 18.62 15.61 12.55 22.9 16.14 48N 59.35 48N 66.38 18.27 2.27 48A 81.45 9.77 5.03 3.05 48A 68.62 14.82 15.15 21.44 13.11 0.68 72N 61.6 21.33 15.72 72N 63.71 85.99 70.89 12.4 14.58 72A 6.67 4.94 1.61 72A 96N 65.66 18.23 14.21 96N 63.33 19.3 16.06 0.66 86.91 5.93 96A 72.23 10.71 12.95 96A 4.93 1.44

Supplementary figure 2

Figure S2. Representative time course analysis of the cell cycle for NLF and SKNAS cell lines transfected with the non targeting control miRNA (NTC) or miR-34a mimic. Values are % of cells gated.

0.66

0.94

0.62

0.6

0.48

1.03

0.98

2.29

## Supplementary figure 3

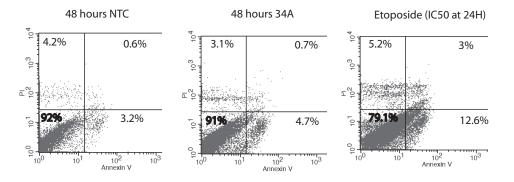
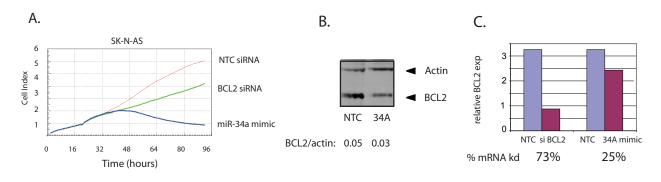


Figure S3: FACS scatter plots of FITC Annexin V of IMR5 cells treated with and without miR-34A mimic and an etoposide positive control. The x - axis is Annexin V staining and the y - axis is PI staining. Values are % of cells gated in a quadrant.



## Supplementary figure 4

Figure S4: A. BCL2 siRNA knockdown has a modest growth inhbitory effect on SK-N-AS growth. NTC = non targeting control siRNA.

B. Western blot 48 hours after miR-34a mimic transfection results is decreased BCL2 protein. NTC = non targeting control microRNA mimic 34A = miR-34a mimic. BCL2/Actin is the ratio of the integrated intensity (pixel volume) of the BCL2 band to the actin band.

C. BCL2 siRNA and miR-34a mimic decrease BCL2 mRNA. Relative BCL2 expression

is the expression of BCL2 normalized to the geometric mean of three housekeeping genes.