# Genome wide expression profiling of p53 regulated miRNAs in neuroblastoma

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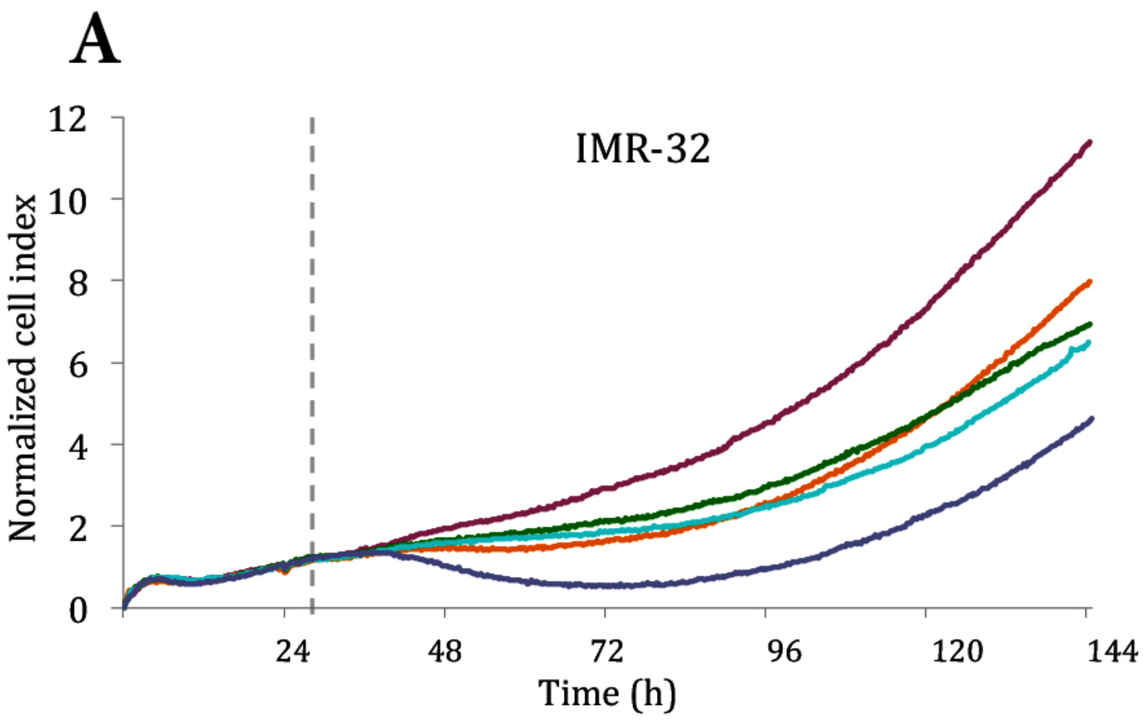
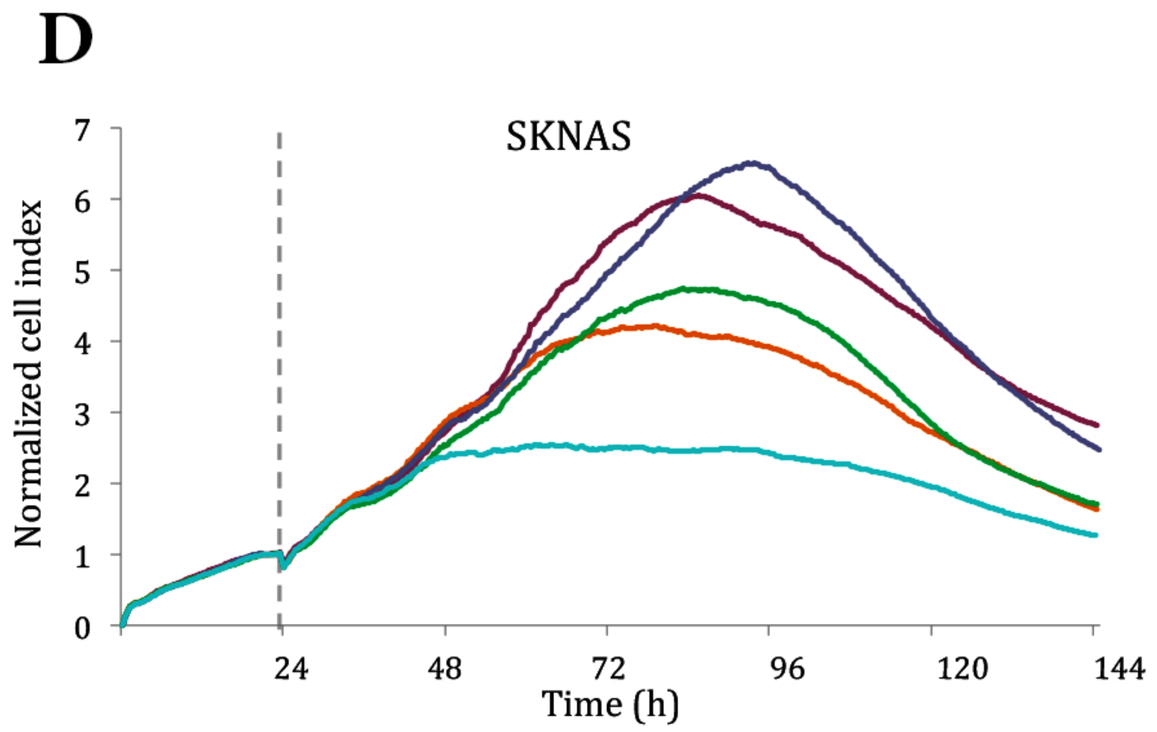
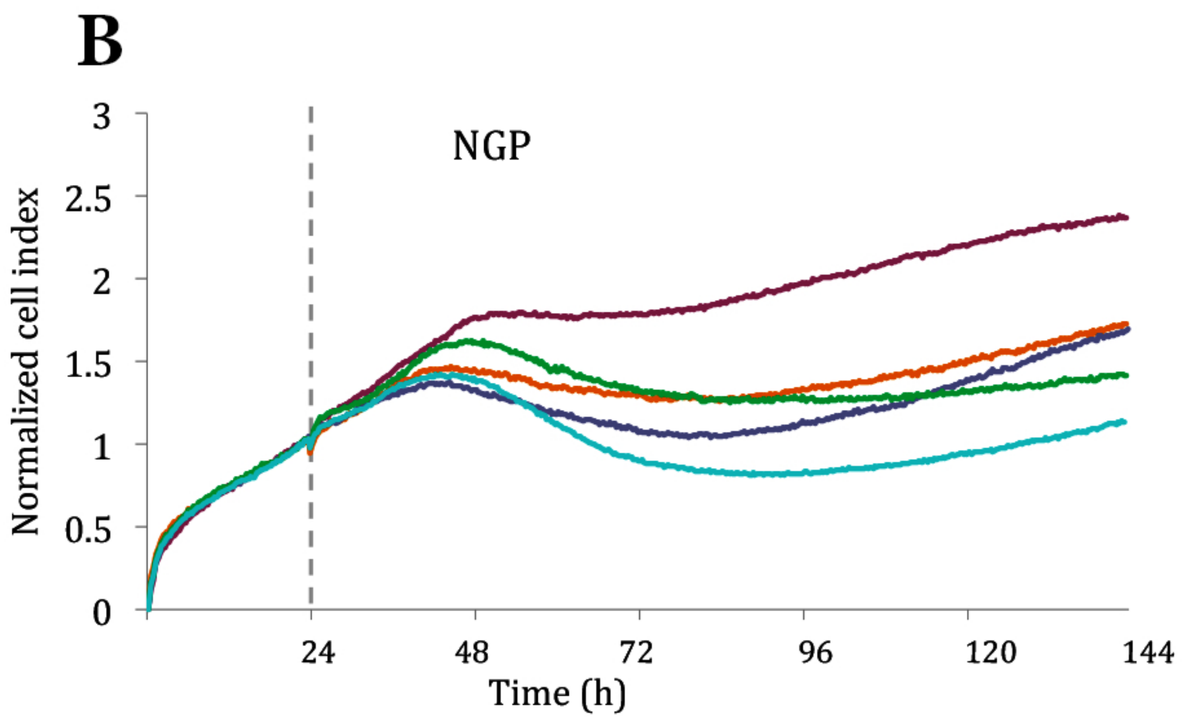
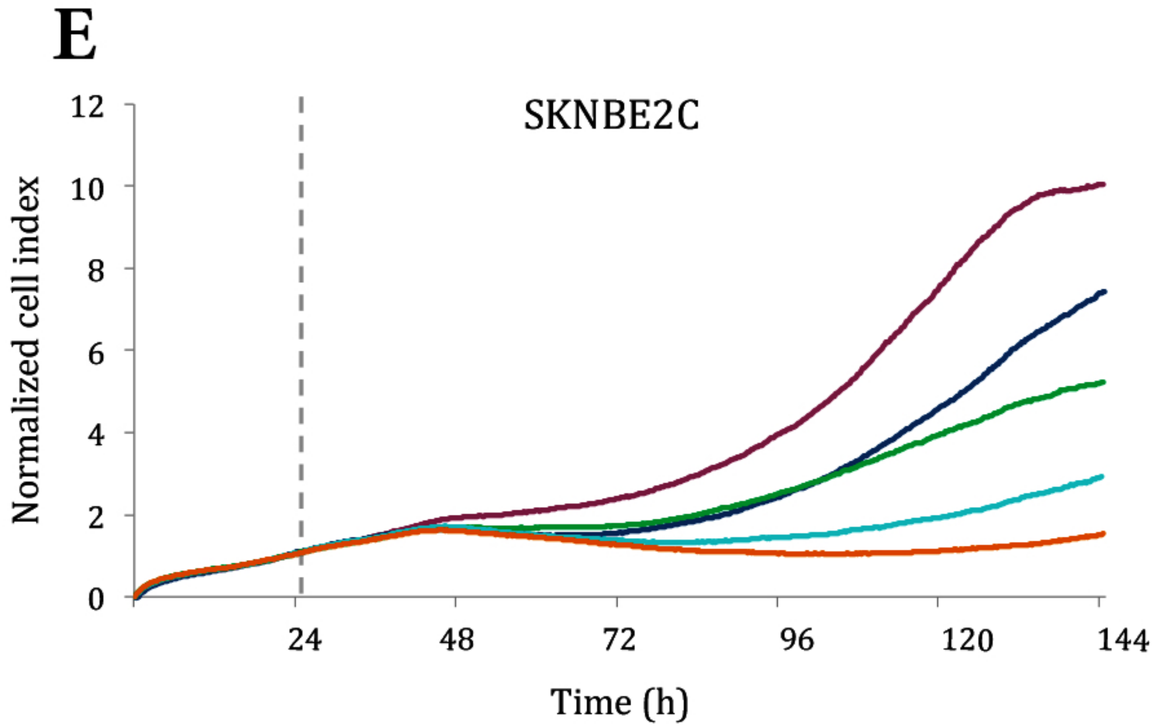
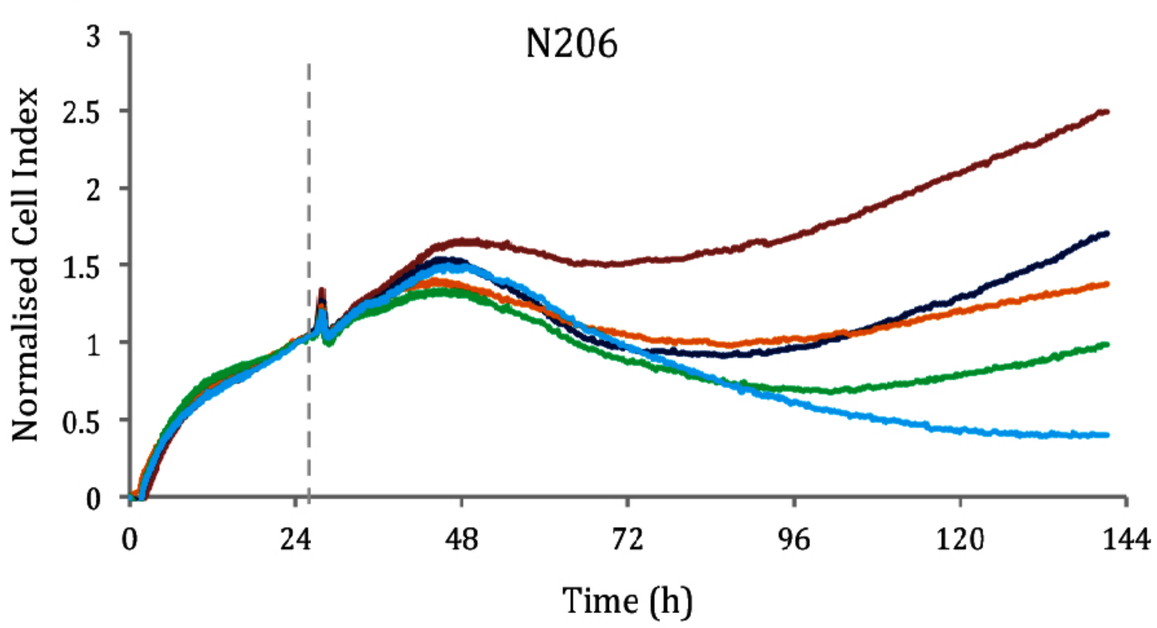
# Figure S1


A
IMR-32
Normalized cell index
0
2
4
6
8
10
12
24
48
72
96
120
144
Time (h)


D
SKNAS
Normalized cell index
0
1
2
3
4
5
6
7
24
48
72
96
120
144
Time (h)


B
NGP
Normalized cell index
0
0.5
1
1.5
2
2.5
3
24
48
72
96
120
144
Time (h)


E
SKNBE2C
Normalized cell index
0
2
4
6
8
10
12
24
48
72
96
120
144
Time (h)


C
N206
Normalised Cell Index
0
0.5
1
1.5
2
2.5
3
0
24
48
72
96
120
144
Time (h)

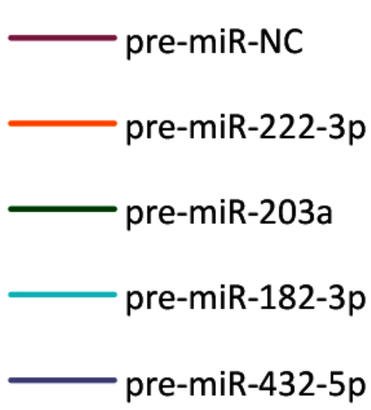

pre-miR-NC
pre-miR-222-3p
pre-miR-203a
pre-miR-182-3p
pre-miR-432-5p

Figure S2

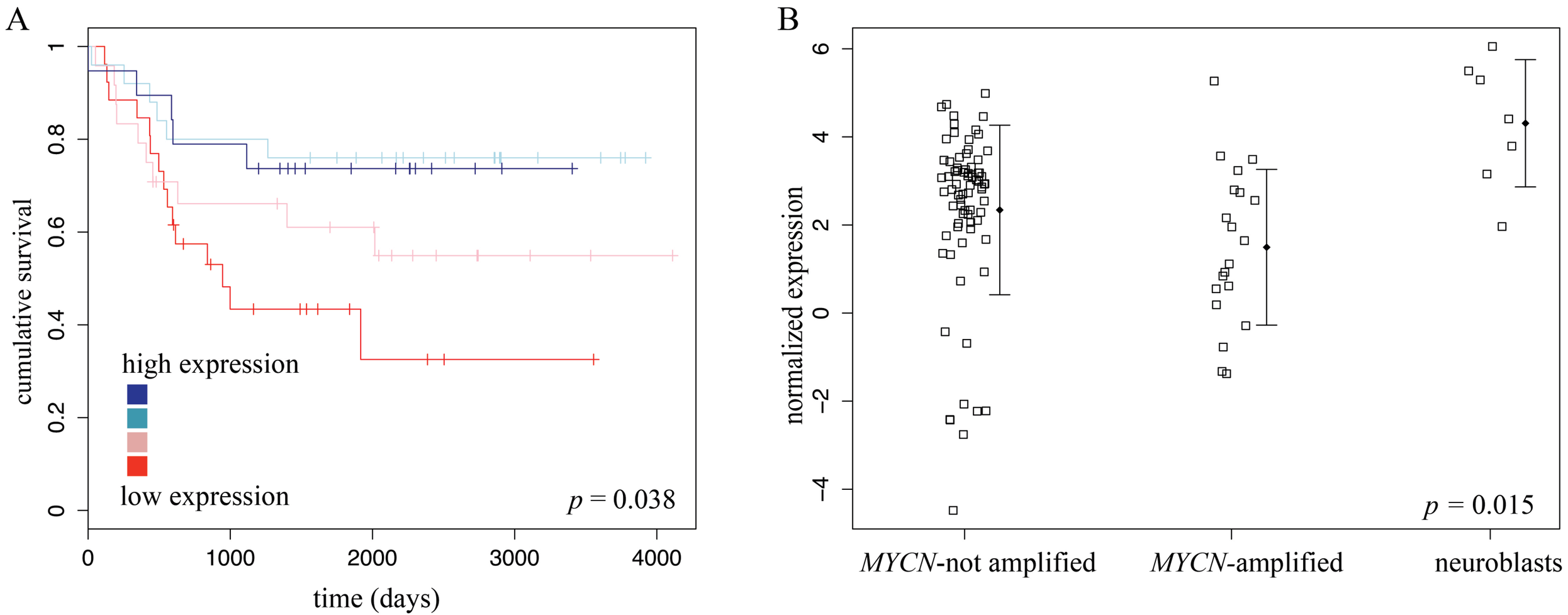

A
cumulative survival
0
0.2
0.4
0.6
0.8
1
high expression
low expression
p = 0.038
0
1000
2000
3000
4000
time (days)
B
normalized expression
−4
−2
0
2
4
6
p = 0.015
MYCN-not amplified
MYCN-amplified
neuroblasts

Figure S1: **Overexpression of miRNAs reduces proliferation.** Neuroblastoma cell lines were transfected with the indicated pre-miRs, and their growth was assessed using the xCELLigence system. Transfection time point is used for normalization (dotted line). IMR-32(**A**), NGP (**B**), N206 (**C**), SKNAS (**D**), SKNBE(2c) (**E**).

Figure S2: **Survival and expression analysis of miR-432-5p.** Kaplan-Meier progression-free survival curve for neuroblastoma patients (n=100) stratified according to miR-432-5p expression levels (quartiles) (log-rank test p-value) **(A)**. Comparison of miR-432-5p expression between neuroblasts and primary neuroblastoma tumors stratified according to MYCN status, data compared using rank product analysis. MNN (*MYCN* non-amplified neuroblastoma), MNA (*MYCN* amplified neuroblastoma) **(B)**.

**miR-432-5p expression is associated with progression free survival of neuroblastoma patients and is expressed higher in normal fetal neuroblasts**

We analyzed the expression patterns of the aforementioned miRNAs in a cohort of 100 primary neuroblastoma tumors and human fetal adrenal neuroblasts (details in materials and methods), the latter being the cell of origin for neuroblastoma [7,12]. While the miRNAs were not significantly associated to overall survival, low expression of miR-432-5p was significantly associated with poor progression-free survival and shows lower expression in the *MYCN*-amplified neuroblastoma tumors as compared to the tumors without *MYCN* amplification. When comparing the expression of the 4 miRNAs between the neuroblastoma tumors and the neuroblasts, miR-432-5p and miR-203a show higher expression in the neuroblasts as compared to the neuroblastoma tumors (Figure 4).