

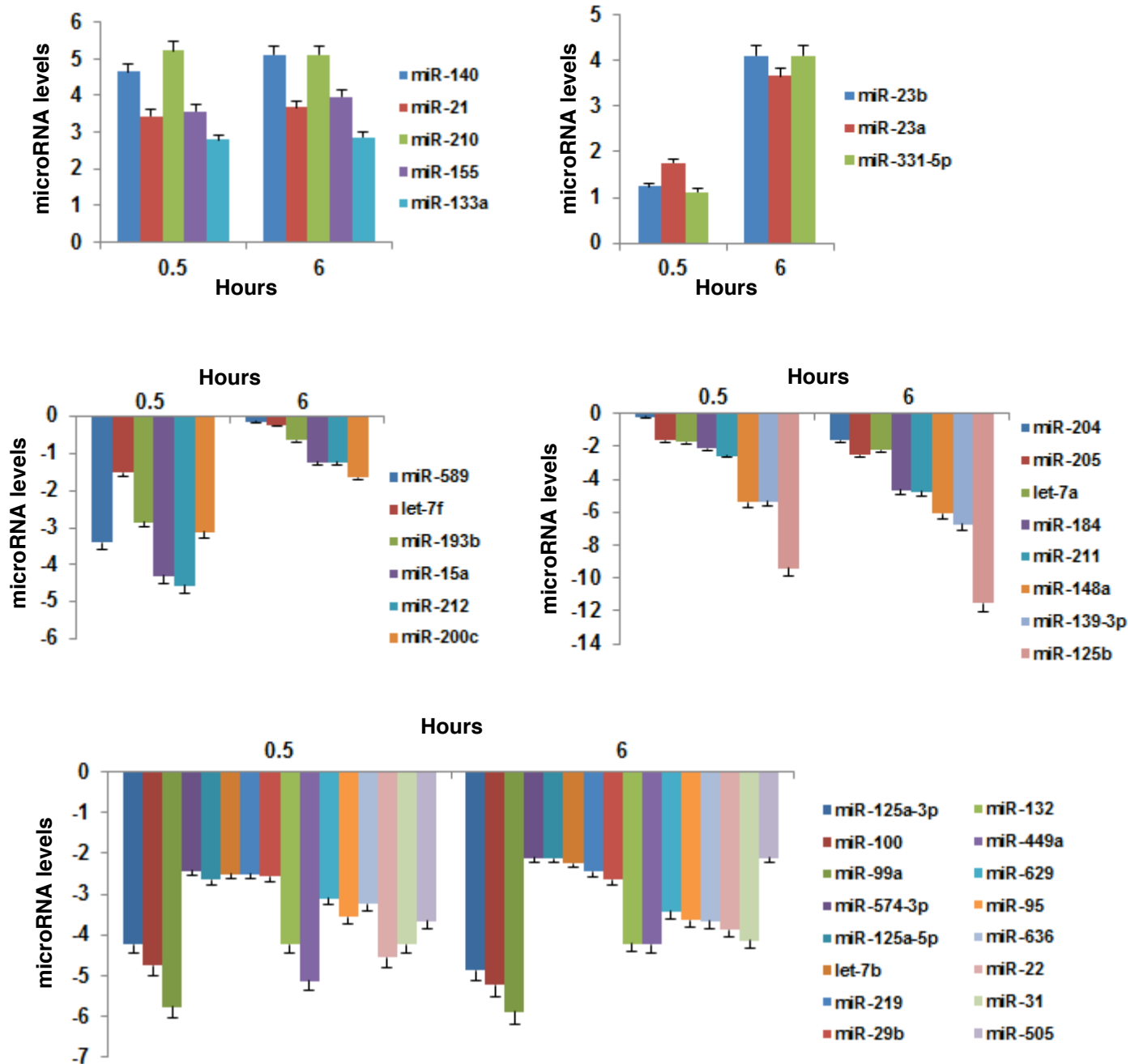
## Supp.Table 1

MicroRNA	NF-KB Binding Sites (hg18)	PhylCRM Score
miR-21	chr17: 55272130-54	152.32
miR-210	chr11: 557736-50	103.43
miR-155	chr21: 25867053-66	170.23

## Supp.Table 2

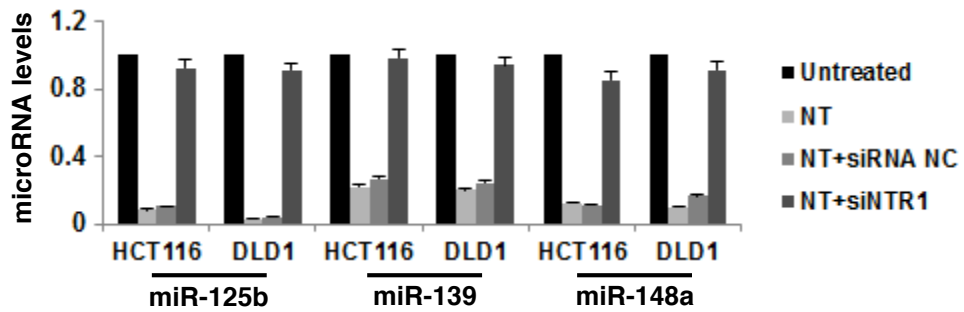
NF-KB binding motif	in miR-155	in miR-21
Sequence	<b>GGAAATTTC C</b>	<b>GGAAAATTTC C</b>
Coordinates	<b>chr21:25,867,055-25,867,064</b>	<b>chr17:55,272,130-55,272,139</b>

## Supp. Figure 1



**Suppl. Figure 1. Validation of microRNA array data by SYBR green real-time PCR analysis.** The expression of levels of the differentially expressed microRNAs identified by TLDA microRNA screen analysis (Applied Biosystems) was validated by real-time PCR analysis in the same time points. The experiments were performed in triplicate and the data represent mean  $\pm$  SD.

## Suppl. Figure 2



**Suppl. Figure 2. Neurotensin suppresses microRNA expression through NTR1 in HCT116 and DLD1 colon cancer cells.** NTR1 expression was inhibited in HCT116 and DLD1 colon cancer cells by siRNA treatment for 48h; these cells were treated with neurotensin (100 nM) for 6h and the expression levels of miR-125b, miR-139 and miR-148a were assessed by real-time PCR analysis. All the data show mean  $\pm$  SD of three independent experiments.

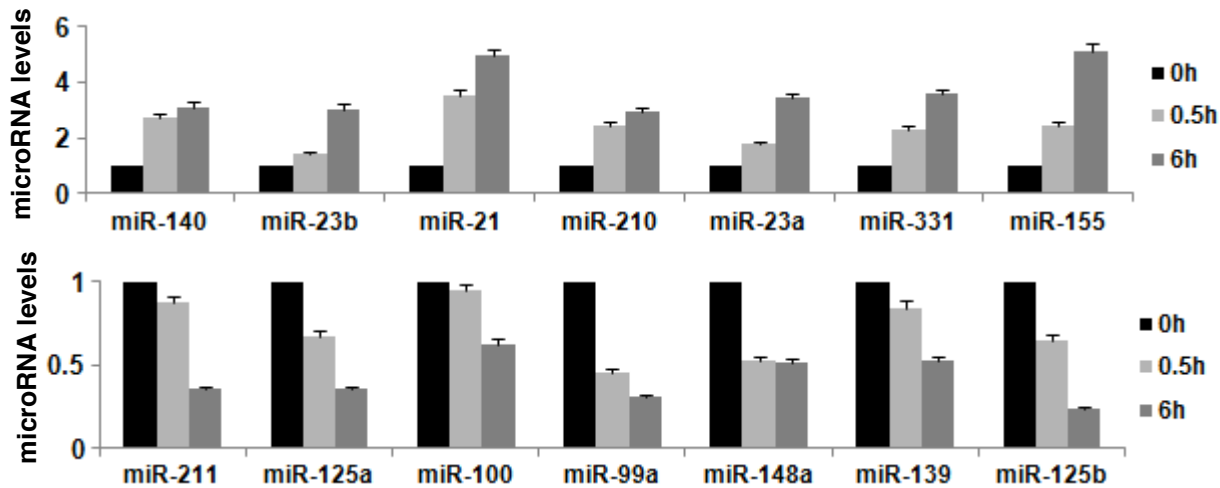
## Supp. Figure 3



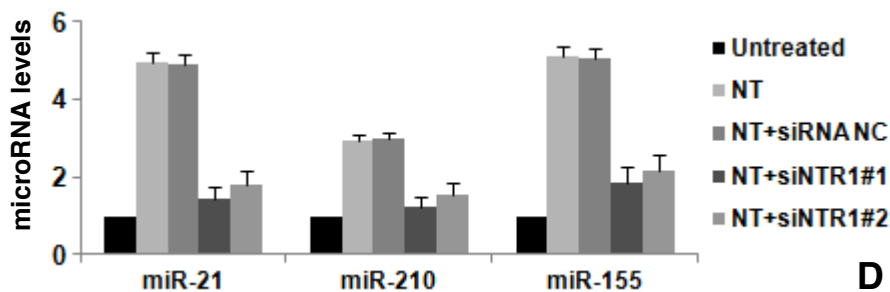
**Suppl. Figure 3. NF- $\kappa$ B phosphorylation status after neurotensin treatment in colon cancer cells.** Evaluation of NF- $\kappa$ B protein expression and phosphorylation levels in HCT116 and DLD1 cells treated with neurotensin (100nM) for 0.5 and 6h.

## Supp. Figure 4

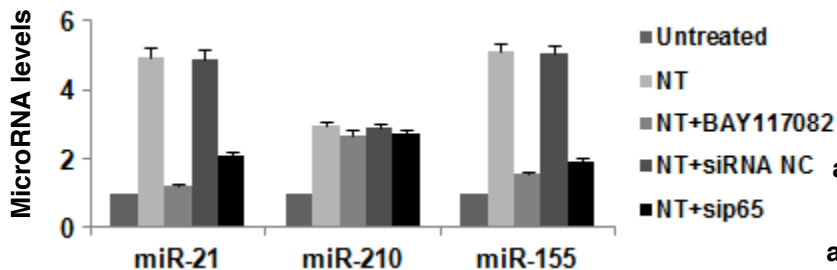
**A**



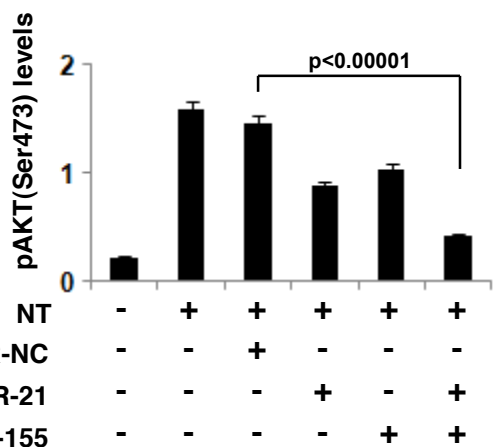
**B**



**C**

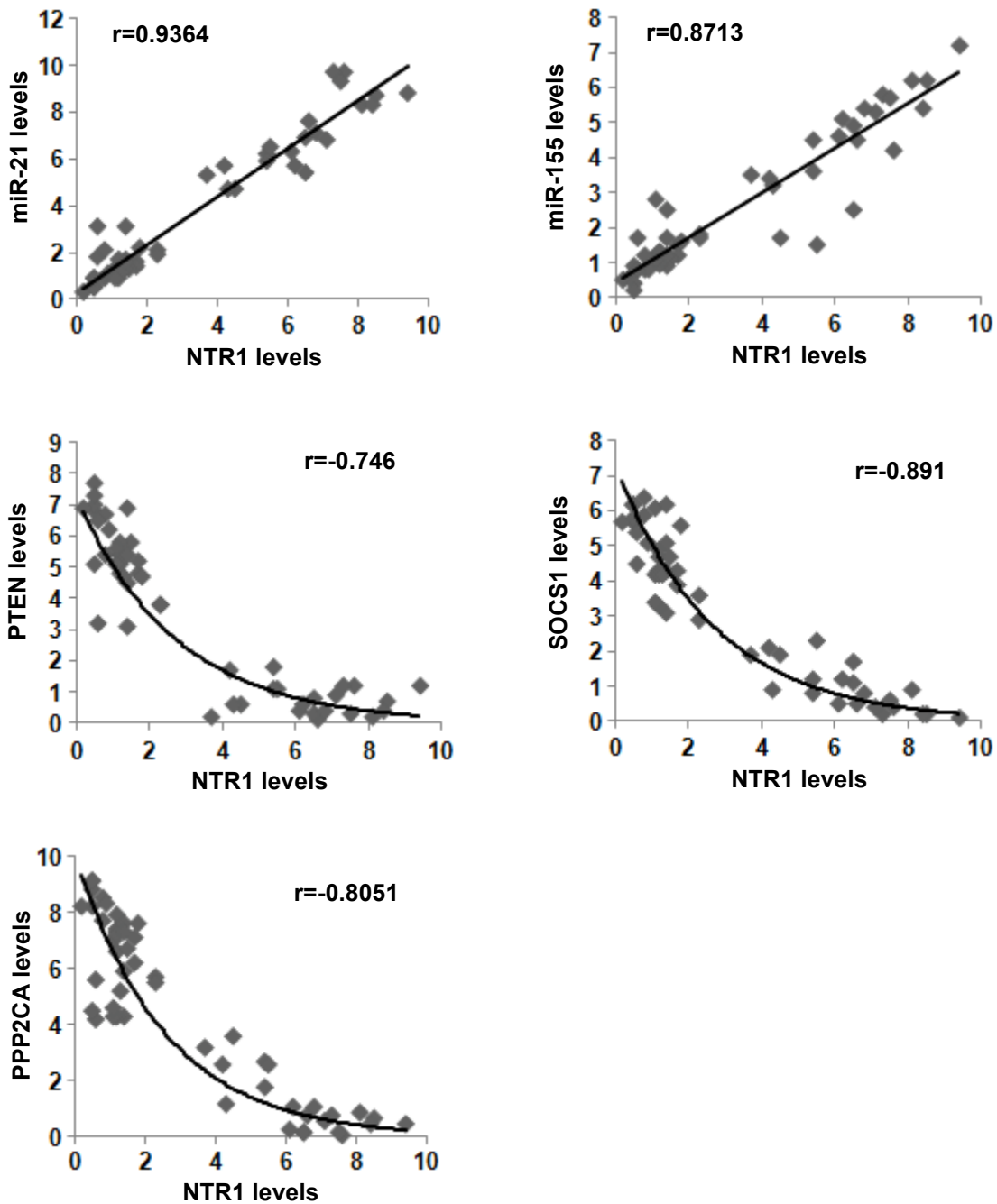


**D**



**Suppl Figure 4. Neurotensin circuit in LoVo colon cancer cells. (A)** MicroRNA expression levels in LoVo cells 0.5 and 6h post neurotensin treatment. The expression levels were assessed by real-time PCR analysis for the top seven neurotensin up- and down-regulated microRNAs in NCM460-NTR1 cells. **(B)** NTR1 expression was inhibited in LoVo colon cancer cells by siRNA treatments (siNTR1#1 or siNTR1#2, 100 nM) for 48h; these cells were treated with neurotensin (100 nM) for 6h and the expression levels of miR-21, miR-210 and miR-155 were assessed by real-time PCR analysis. **(C)** Expression levels of miR-21, miR-210 and miR-155, assessed by real-time PCR, in LoVo cells that were treated with a pharmacological inhibitor of NF- $\kappa$ B pathway (BAY-117082, 5 $\mu$ M) or an siRNA negative control (siRNA NC, 100nM) or an siRNA against p65 (sip65, 100nM) for 48h and then treated with neurotensin (100nM) for 6h. **(D)** AKT phosphorylation (s473) levels, assessed by ELISA, in LoVo cells transfected with miR-155 (100nM) or si-PPP2CA (100nM) for 24h.

## Supp. Figure 5



**Suppl. Figure 5.** Correlation between NTR1 expression levels and miR-21 or miR-155 or PTEN or SOCS1 or PPP2CA in normal and colon cancer tissues.