

OMTN, Volume 9

## **Supplemental Information**

### **miR-124 Inhibits Lung Tumorigenesis Induced by K-ras Mutation and NNK**

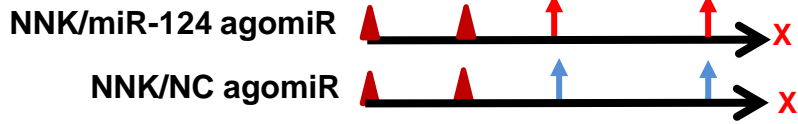
**Hua Jin, Qing Li, Fenghao Cao, Shu-Nan Wang, Ren-Tao Wang, Yun Wang, Qun-You Tan, Cheng-Run Li, Hua Zou, Dong Wang, and Cheng-Xiong Xu**

A

A/J female mice



1 2 3 5 14 15 (weeks)



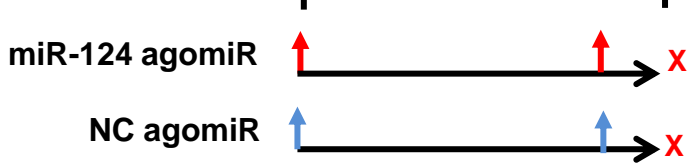
|   |                                      |
|---|--------------------------------------|
| ↑ | miR-124 agomiR treatment once a week |
| ↑ | NC agomiR treatment once a week      |
| ▲ | NNK treatment once a week            |
| X | Sacrifice                            |

B

K-ras<sup>LA1</sup> female mice

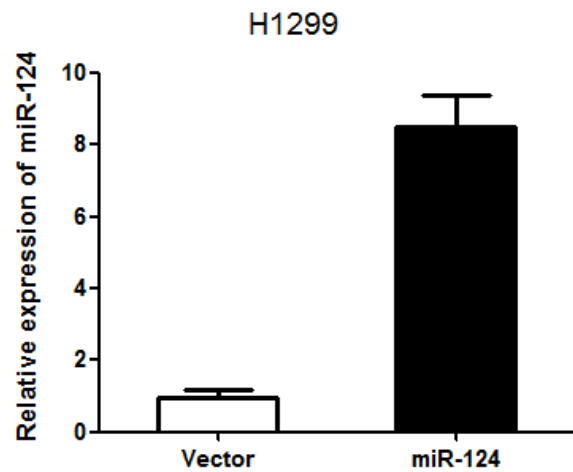
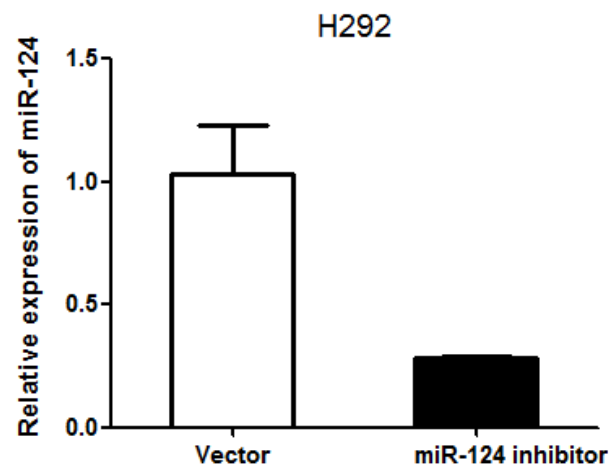
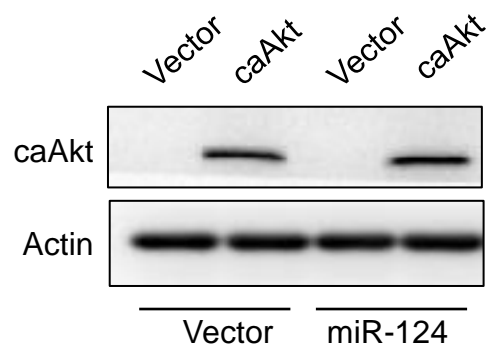
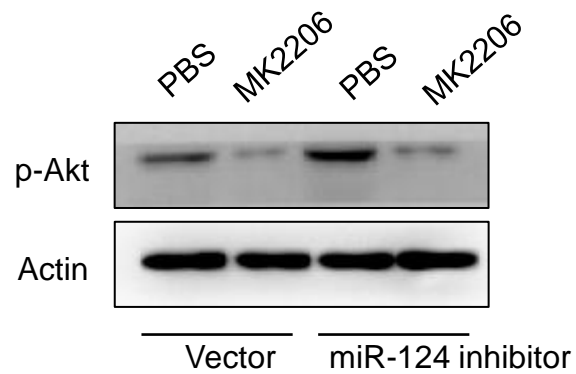


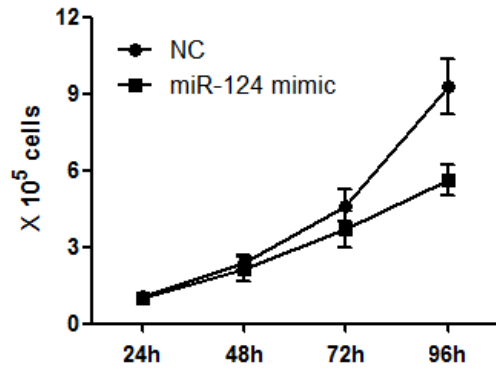
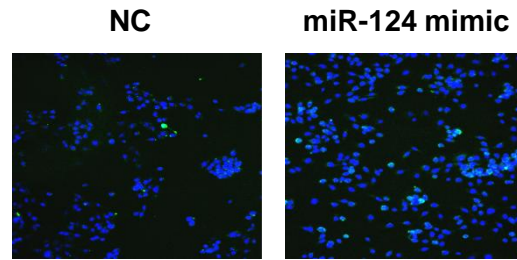
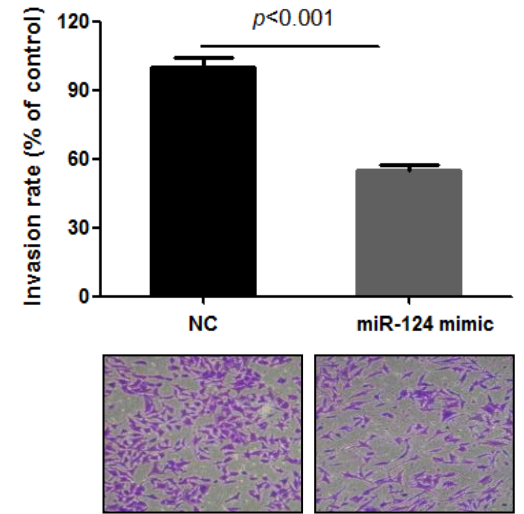
1 5 6 (wks)



|   |                     |
|---|---------------------|
| ↑ | agomiR treatment    |
| ↑ | NC agomiR treatment |
| X | Sacrifice           |

Figure S1.

**A****B****C****H1299****D****H292****Figure S2.**

**A****B****C****Figure S3.**

## **Supplementary Figure legends**

**Supplementary Figure S1. Schematic diagram of the animal experiments.** (A) Experimental design for NNK-induced lung tumor models. (B) Experimental design for K-ras<sup>LA1</sup> transgenic mice.

**Supplementary Figure S2.** (A) miR-124 expression was measured in stable expressing miR-124 H1299 cells and their control cells by RT-qPCR. (B) miR-124 expression was measured in stable expressing miR-124-antisense H292 cells and their control cells by RT-qPCR. (C) Stably expressing miR-124 H1299 cells and their control cells were transfected with indicated plasmid. After 48 hours of transfection, caAKT expression level was measured by Western blot. (D) Stably expressing miR-124-antisense H292 cells and their control cells were treated with or without MK2206 for 24 hours, then, cells were subjected to Western blot analysis.

**Supplementary Figure S3. MiR-124 significantly inhibits cell proliferation, invasion and induces apoptosis in NSCLC cells.** (A) miR-124 inhibits H1299 cell proliferation. Cells were transfected with negative control oligonucleotides (NC) or miR-124 mimics. After 24 hours of transfection, cells were subjected to cell proliferation assay. (B) miR-124 induces apoptosis in H1299 cells. H1299 cells were transfected with NC or miR-124 mimic. After 48 hours of transfection, cells were subjected to TUNEL assay. (C) miR-124 inhibits H1299 cell invasion. H1299 cells were transfected with NC or miR-124 mimic. After 24 hours of transfection, cells were subjected to invasion assay and the invasion assay was conducted for 24 hours.