## **Supplementary information to:**

## **Original article:**

## EXOSOMES DERIVED FROM COLORECTAL CANCER CELLS TAKE PART IN ACTIVATION OF STROMAL FIBROBLASTS THROUGH REGULATING PHLPP ISOFORMS

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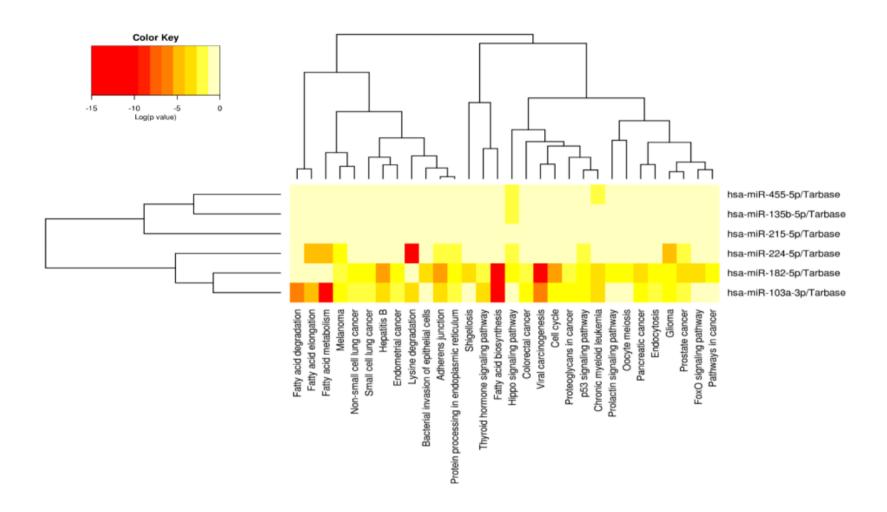
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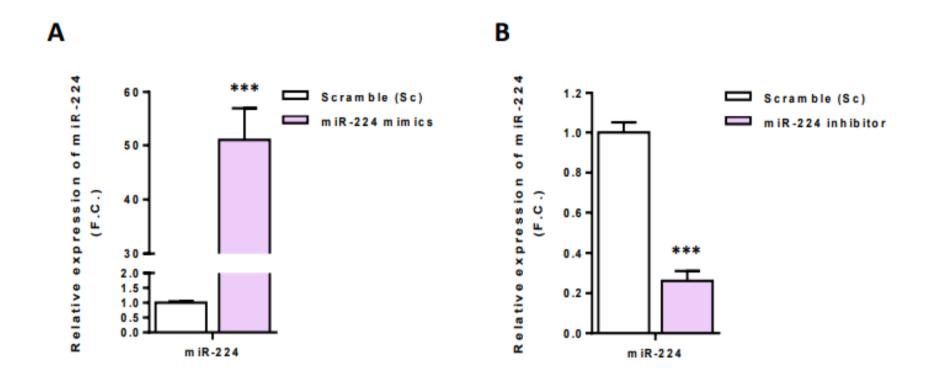
## Supplementary Table 1: The clinicopathological characteristics of CRC patients

Characteristics	No. of CRC patients (%)	No. of HC individuals (%)
Age (years)		
<50	15 (37.5)	12 (40)
≥50	25 (62.5)	18 (60)
Gender		
Male	32(80)	22(73)
Female	8 (20)	8 (27)
Position		
Colon	17 (42.5)	
Rectal	23 (57.5)	
Tumor size		
<2 cm	14 (35)	
≥2 cm	26 (65)	
LNM		
Metastasis	17 (42.5)	
No metastasis	23 (57.5)	
Tumor stage		
I+II	24 (60)	
III	16 (40)	

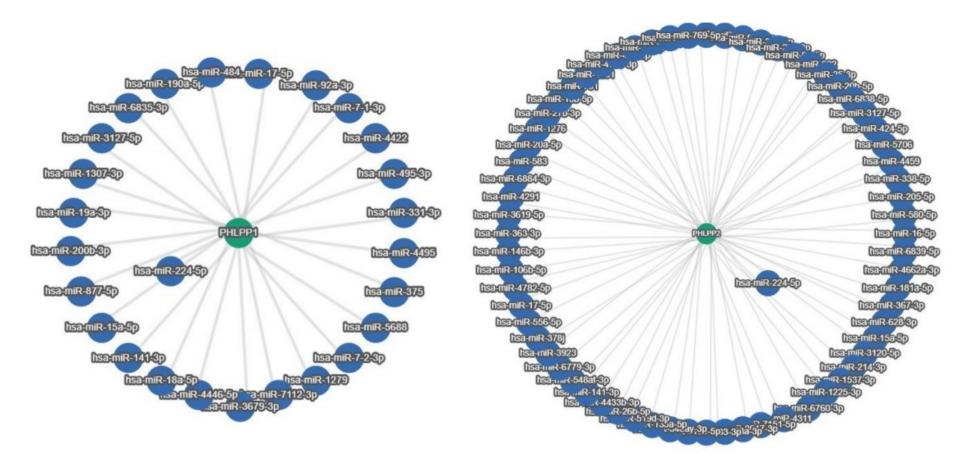
Abbreviations: CRC, Colorectal cancer; HC, Healthy controls; LNM, Lymph node metastasis



**Supplementary Figure 1: Functional enrichment analysis.** The heatmap illustrates the comparison of differentially expressed candidate miRNAs with significantly enriched functional pathways. In the heatmap, reddish colors indicate higher statistical significance, as denoted by the color key provided above. Additionally, the attached dendrograms on both axes represent the results of hierarchical clustering for miRNAs and pathways, respectively. The figure was generated using the output from Diana miRpath V.3.0 (<a href="https://dianalab.e-ce.uth.gr/html/mirpathv3/index.php?r=mirpath">https://dianalab.e-ce.uth.gr/html/mirpathv3/index.php?r=mirpath</a>)



Supplementary Figure 2: Transfection efficiency of miR-224 mimic and miR-224 inhibitor measured by RT-qPCR in stromal cells, following 24h after transfection. A. RT-qPCR data revealed that miR-224 expression was substantially increased in fibroblasts that were transfected by miR-224 mimic than the cells transfected with negative control scramble. B. Results also demonstrated a significant decrease in miR-224 expression level in fibroblasts transfected with miR-224 inhibitor than those cells transfected with negative control scramble. Columns, mean of three different experiments; bars, SD. \*\* P< 0.01



**Supplementary Figure 3:** The interaction networks between PHLPP1 and PHLPP2 and the putative targeting miRNAs provided by miRTargetLink Human algorithm (<a href="https://ccb-web.cs.uni-saarland.de/mirtargetlink">https://ccb-web.cs.uni-saarland.de/mirtargetlink</a>)