

Table S1. The baseline demographics and clinical characteristics of enrolled subjects.

Variables	Testing set			Validation set		
	HT (n=10)	Normal (n=10)	P value	HT (n=30)	Normal (n=30)	P value
Age (years)	47.5 ± 11.6	47.1 ± 11.9	0.532	47.1 ± 11.2	46.4 ± 12.1	0.127
Sex (male/female)	4/6	4/6	-	9/21	9/21	-
BMI (kg/m ²)	23.1 ± 2.8	22.9 ± 2.1	0.216	23.4 ± 3.4	23.1 ± 2.7	0.178
TSH (mIU/L)	2.8 (0.7-3.8)	2.4 (1.2-3.6)	0.187	2.2 (0.1-6.6)	2.0 (0.2-5.4)	0.467
FT3 (pmol/L)	4.2 (3.7-4.5)	4.3 (3.5-4.3)	0.623	4.7 (3.4-7.5)	4.5 (3.2-5.3)	0.381
FT4 (pmol/L)	15.1 (14.2-17.1)	15.4 (13.9-18.4)	0.327	15.2 (12.8-33.0)	15.2 (10.9-23.4)	0.169
TgAb (IU/mL)	209.5 (58.1-4000)	38.9 (11.2-112)	<0.001	253 (115-2298)	13.5 (10.1-73.4)	<0.001
TPOAb (IU/mL)	187.5 (60.2-600)	17.6 (9.0-32)	<0.001	204 (44-600)	9 (9-16.2)	<0.001

HT: Hashimoto thyroiditis; BMI: body mass index; TSH: thyroid stimulating hormone; FT3: free T3; FT4: free T4; TgAb: thyroglobulin antibody; TPOAb:thyroperoxidase antibody.

Table S2. Univariate and multiple analysis for difference miRNAs.

miRNAs	Univariate		Multivariate	
	OR (95%CI)	P value	OR (95%CI)	P value
miR-142-3p	1.613 (1.185-2.195)	0.002*	1.437 (1.016-2.032)	0.040*
miR-146a-5p	1.649 (1.176-2.311)	0.004*	1.372 (0.965-1.951)	0.078

CI: confidence interval; OR: Odds ratio; *statistically significant difference.

Figure S1. The uncropped original western blots from main figures.

Fig 1C

Cells lysis sEV

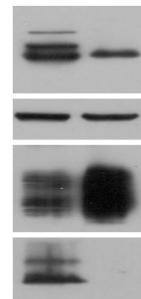


Fig 2E

Cells lysis sEV (T_N) sEV(T_{HT})

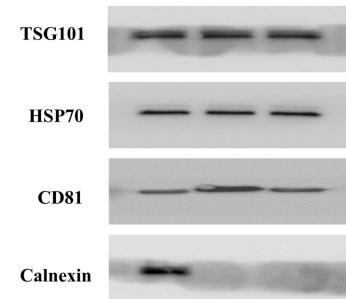


Fig 3B

Foxp3

P #1 P #2 P #3
sEV miR-142-3p low

P #1 P #2 P #3
sEV miR-142-3p high

GAPDH

P #1 P #2 P #3
sEV miR-142-3p high

Fig 5D

RAC1

GAPDH

Control inhibitor
miR-142-3p inhibitor
Control mimics
miR-142-3p mimics

Fig 5I

RAC1

p-ERK1/2

GAPDH

siCtrl	+	+	-	-
control inhibitor	+	-	-	+
miR-142-3p inhibitor	-	+	+	-
siRAC1	-	-	+	+

Fig 6F

Caspase3

#1 #2 #3
LV-ctrl

#1 #2 #3
LV-sponge

RAC1

#1 #2 #3
LV-ctrl

LV-sponge

p-ERK1/2

#1 #2 #3
LV-ctrl

#1 #2 #3
LV-sponge

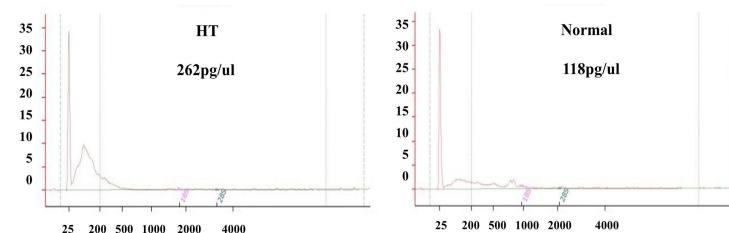
GAPDH

#1 #2 #3
LV-ctrl

LV-sponge

Figure S2. The lowest RNA concentration of tissue sEV total RNA and levels of tissue sEV miR-103a-3p

A. Lowest RNA concentration in sEVs isolated from HT tissue and normal tissue



B. Levels of tissue sEV miR-103a-3p

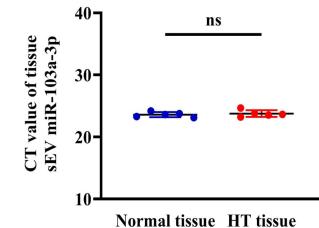


Figure S3. Tissue sEVs isolated from HT patients promotes apoptosis of thyrocyte cells which can be prevented by miR-142-3p inhibitor

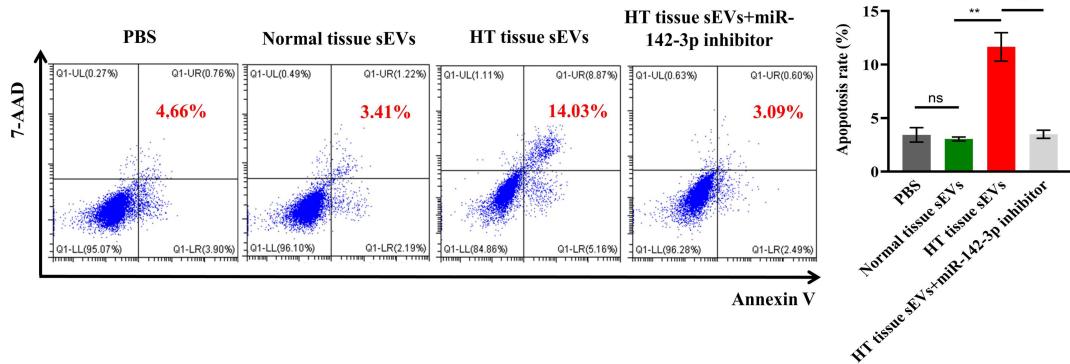


Figure S4. Biological function enrichment analysis and validation of tissue sEV miRNAs

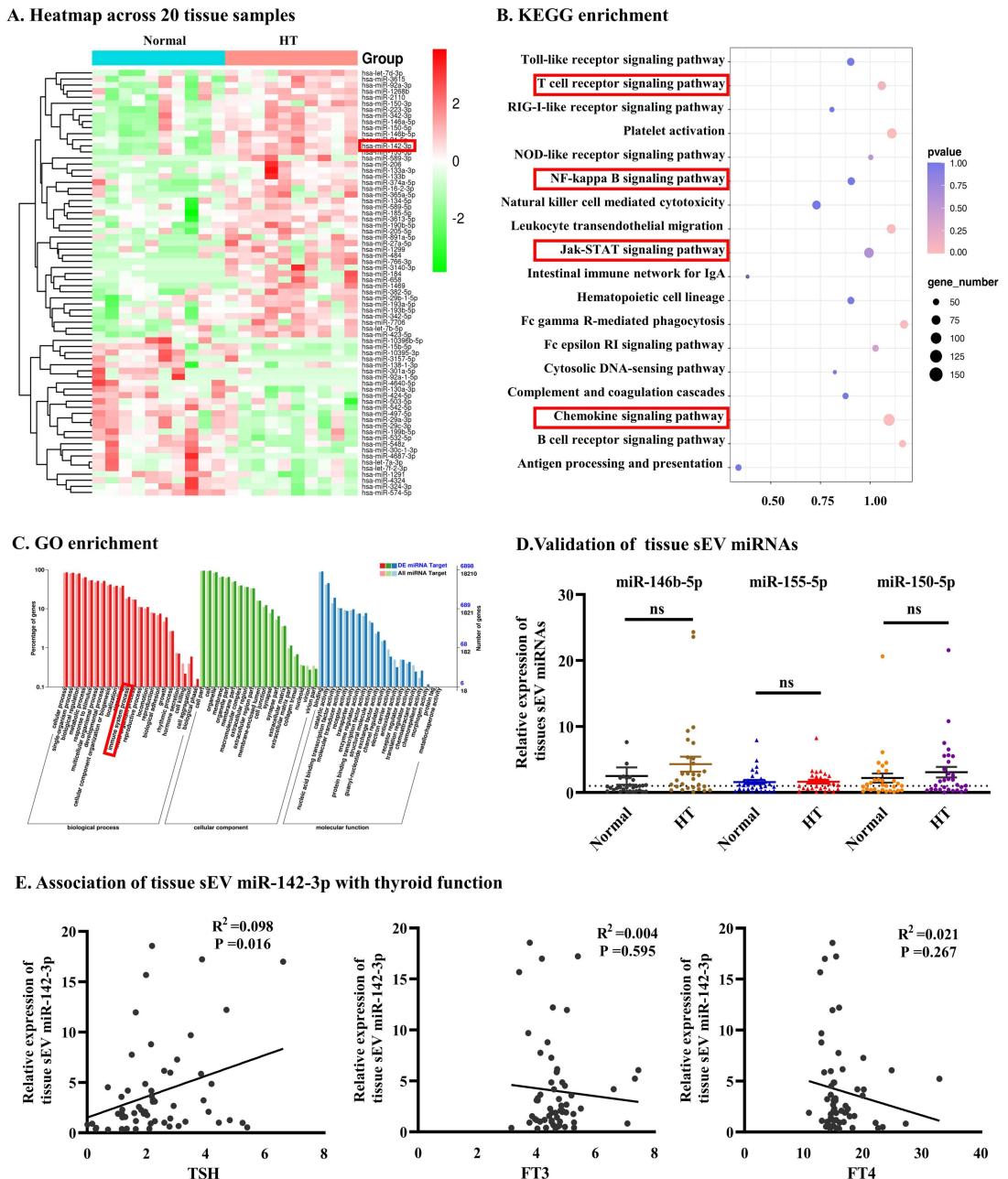


Figure S5. The levels of miR-142-3p in specific immune cell types and T lymphocyte-derived sEV

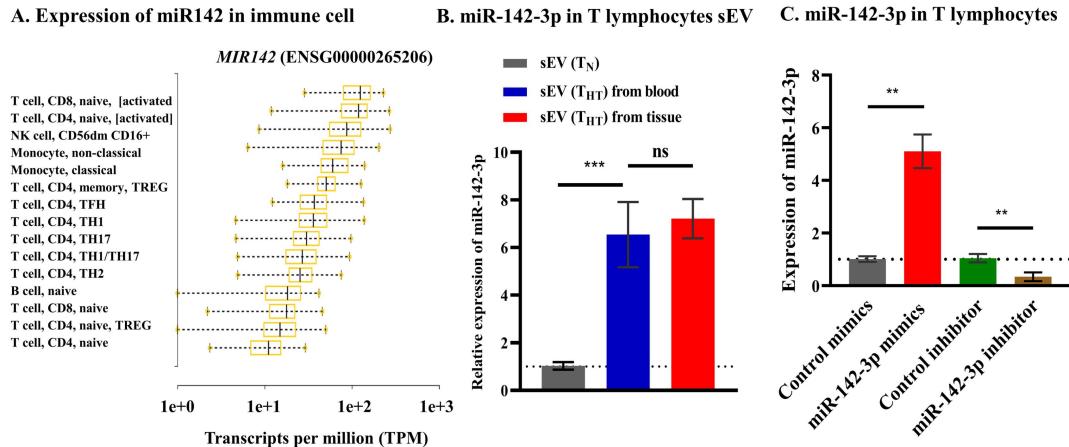


Figure S6. The miR-142-3p levels after transfection with mimics or inhibitor in thyrocyte cells, T lymphocyte migration and the effect of miR-142-3p on CXCL10 secretion

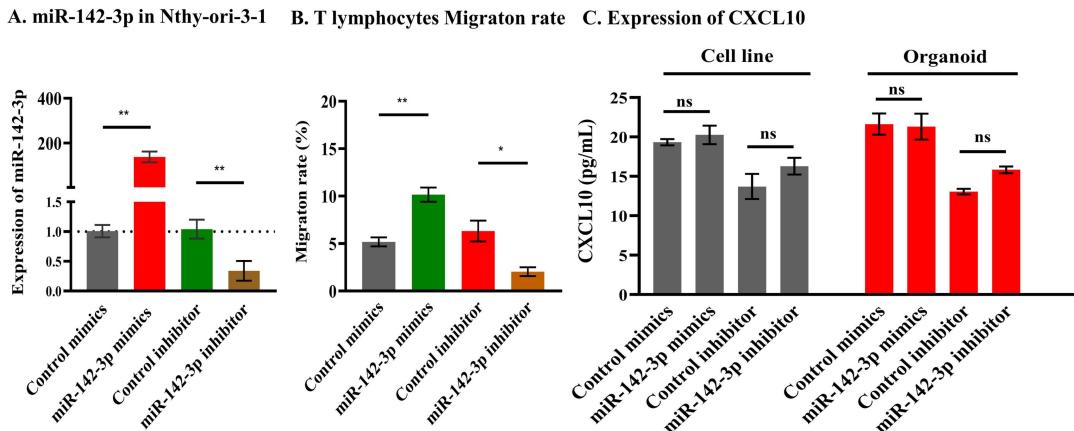


Figure S7. Predicted target and inhibition efficiency of siRNA for RAC1

